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ExxonMobil
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June 13, 2006

Ms. Jo Bentz
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

RE: Former Exxon RAS #7-3035/4501 Sonoma Highway, Santa Rosa, California.

Dear Ms. Bentz:

Attached for your review and comment is a copy of the letter report entitled *Interim Remedial Action Plan*, dated June 13, 2006, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Petaluma, California, and details proposed activities at the subject site.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,



JC
Jennifer C. Sedlachek
Project Manager

Attachment: ERI's *Interim Remedial Action Plan*, dated June 13, 2006.

cc: w/ attachment
Mr. Paul Lowenthal, City of Santa Rosa Fire Department
Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management

w/o attachment
Ms. Paula Sime, Environmental Resolutions, Inc.



June 13, 2006
ERI 200311.R29

Ms. Jennifer C. Sedlachek
ExxonMobil Refining & Supply – Global Remediation
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Executive Summary of Interim Remedial Action Plan,
Former Exxon Service Station 7-3035
4501 Sonoma Highway, Santa Rosa California

Ms. Sedlachek:

At the request of Exxon Mobil Corporation (Exxon Mobil), Environmental Resolutions, Inc. (ERI) has prepared this Interim Remedial Action Plan (IRAP) for the subject site. The IRAP discusses current site conditions, summarizes the results of previous feasibility studies, evaluates the effectiveness of past remedial actions, and proposes a modified approach to remediating groundwater beneath the subject site.

ERI recommends that signed copies of the IRAP be forwarded to:

Ms. Jo Bentz
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Mr. Paul Lowenthal
City of Santa Rosa Fire Department
955 Sonoma Avenue
Santa Rosa, California 95404

Mr. Robert C. Ehlers, M.S., P.E.
The Valero Companies
Environmental Liability Management
685 West Third Street
Hanford, California 93230

Please call Ms. Paula Sime, ERI's project manager for this site at (707) 766-2000 with any questions regarding this report.

Sincerely,
Environmental Resolutions, Inc.

Paula Sime
Project Manager

Enclosure: Interim Remedial Action Plan

INTERIM REMEDIAL ACTION PLAN

for

**Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California**

ERI Job 200311.R29

June 13, 2006

**Prepared for
ExxonMobil Refining & Supply – Global Remediation
4096 Piedmont Avenue #194
Oakland, California 94611**

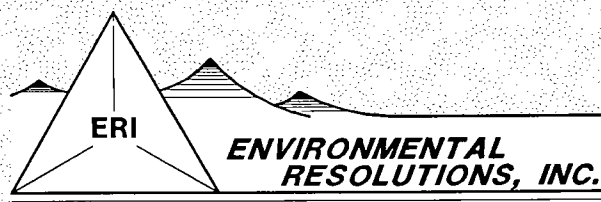


TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE DESCRIPTION	1
2.1	Setting	1
2.2	Site History.....	2
3.0	SITE CONDITIONS	5
3.1	Chemicals of Concern	5
3.2	Site Geology and Hydrogeology	6
3.3	Distribution of Residual Petroleum Hydrocarbons in Soil	6
3.4	Distribution of Dissolved-Phase Petroleum Hydrocarbons in Groundwater	7
3.4.1	Historical Groundwater Monitoring and Sampling	7
3.4.2	Recent Groundwater Monitoring and Sampling.....	7
3.4.3	Results of Cone Penetration Test Borings	8
3.5	Source Areas	9
3.6	Sensitive Receptors	9
3.6.1	Private Wells.....	9
3.6.2	Surface Water.....	10
3.7	Current and Potential Uses of Surface and Groundwater	10
4.0	SUMMARY OF REMEDIAL ACTIONS	10
4.1	AS/SVE Feasibility Testing	10
4.2	AS/SVE System Operation	11
4.3	System Retrofit to Dual-Phase Extraction	11
5.0	EVALUATION OF REMEDIAL ACTIONS.....	12
5.1	Groundwater Cleanup Objectives.....	12
5.2	Effectiveness of Past Remediation.....	12
6.0	PROPOSED REMEDIAL ACTION	13
7.0	WORK PLAN FOR RECOVERY WELL INSTALLATION	13
7.1	Pre-Drilling Activities	14
7.2	Drilling, Sampling, and Well Installation.....	14
7.3	Report Preparation	15
8.0	LIMITATIONS	15
9.0	REFERENCES	16

TABLES

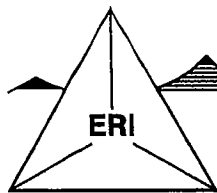
TABLE 1A:	CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
TABLE 1B:	ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
TABLE 2A:	PRIVATE WATER WELL SAMPLING DATA
TABLE 2B:	ADDITIONAL PRIVATE WATER WELL SAMPLING DATA
TABLE 3A:	CUMULATIVE GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
TABLE 3B:	ADDITIONAL CUMULATIVE GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
TABLE 4A:	CUMULATIVE SOIL SAMPLING DATA
TABLE 4B:	ADDITIONAL CUMULATIVE SOIL SAMPLING DATA
TABLE 5:	WELL CONSTRUCTION DETAILS
TABLE 6:	OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
TABLE 7:	OPERATIONAL AND PERFORMANCE DATA FOR SOIL VAPOR EXTRACTION SYSTEM

PLATES

PLATE 1:	SITE VICINITY MAP
PLATE 2:	GENERALIZED SITE PLAN
PLATE 3:	GROUNDWATER ELEVATION MAP
PLATE 4:	CROSS SECTION A-A'
PLATE 5:	CROSS SECTION B-B'
PLATE 6:	CROSS SECTION LOCATIONS
PLATE 7:	SELECT GROUNDWATER ANALYTICAL RESULTS
PLATE 8:	SELECT GROUNDWATER ANALYTICAL RESULTS, PRIVATE WELLS
PLATE 9:	WELL CONSTRUCTION DETAILS – RW1A
PLATE 10:	WELL CONSTRUCTION DETAILS – RW1B
PLATE 11:	WELL CONSTRUCTION DETAILS – RW2B

APPENDICES

APPENDIX A:	REGULATORY CORRESPONDENCE
APPENDIX B:	GROUNDWATER CLEANUP OBJECTIVES
APPENDIX C:	FIELD PROTOCOL



ENVIRONMENTAL RESOLUTIONS, INC.

INTERIM REMEDIAL ACTION PLAN

for

Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California

ERI Job No. 200311.R29

Prepared for

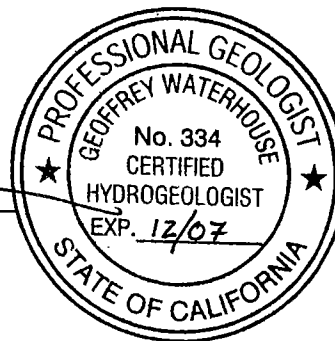
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by

Environmental Resolutions, Inc.

Paula Sime
Project Manager

Geoffrey V. Waterhouse
P.G. 5019
C.H.G. 334
C.E.G. 1561



June 13, 2006

INTERIM REMEDIAL ACTION PLAN

for

Former Exxon Service Station 7-3035

4501 Sonoma Highway

Santa Rosa, California

For ExxonMobil Refining & Supply – Global Remediation

1.0 INTRODUCTION

At the request of Exxon Mobil Corporation (Exxon Mobil), Environmental Resolutions, Inc. (ERI) has prepared this Interim Remedial Action Plan (IRAP) for former Exxon Service Station 7-3035, located at 4501 Sonoma Highway (Highway 12), Santa Rosa, California. This IRAP summarizes environmental work performed to date, discusses subsurface conditions, evaluates the effectiveness of the existing remediation system at the site, and presents a modified approach for remediating groundwater beneath the site. This IRAP was prepared in response to a letter from the California Regional Water Quality Control Board, North Coast Region (Regional Board), dated February 16, 2006 (Appendix A).

2.0 SITE DESCRIPTION

2.1 Setting

The site is located on the northwestern corner of Mission Boulevard and Sonoma Highway in Santa Rosa, California, as shown on the Site Vicinity Map (Plate 1). The locations of the underground storage tanks (USTs), dispenser islands, and other select site features are shown on the Generalized Site Plan (Plate 2). Currently, Premier Petroleum, Inc., operates the site as a Valero-branded service station. Valero Energy Corporation (Valero) owns the underground storage system operated at the site.

There are six on-site groundwater monitoring wells (MW1 through MW4, MW7, and MW8) and two off-site monitoring wells (MW5 and MW6) gauged and sampled on a quarterly basis. Historical and recent groundwater monitoring and sampling data are summarized in Tables 1A and 1B. Historical and recent groundwater monitoring and sampling data from private water wells in the vicinity are summarized in

Tables 2A and 2B. Cumulative results of grab groundwater samples are presented in Tables 3A and 3B. Cumulative analytical results of soil samples are presented in Tables 4A and 4B. Well construction details are presented in Table 5.

Local topography slopes towards the south and west from the site toward Santa Rosa Creek, located approximately 1,000 feet south of the site, which flows west and is a tributary of the Russian River.

2.2 Site History

The following subsections summarize historical site activities.

November 1993 RESNA observed the removal of one 10,000-gallon UST, one 8,000-gallon UST, and one 6,000-gallon UST, used for storing gasoline. RESNA also observed the removal of product lines and dispenser islands at this time. Concentrations of petroleum hydrocarbons were reported in samples collected from beneath the gasoline USTs at 13 feet below ground surface (fbgs). Concentrations of petroleum hydrocarbons were also reported in samples collected from beneath the dispenser islands and the product line trenches near the dispenser islands at 4 fbgs (RESNA, 1994).

December 1993 RESNA observed the removal of a 1,000-gallon single-wall steel used-oil UST. Petroleum hydrocarbons were not detected in samples collected from beneath the used-oil UST. Approximately 950 cubic yards of soil from the November and December 1993 UST removals were removed and transported to BFI Landfill in Livermore, California. Approximately 30 cubic yards of soil were removed, transported as hazardous waste, and disposed of at the Chemwaste Disposal Facility in Buttonwillow, California (RESNA, 1994).

November 1994 ERI observed the drilling of soil borings B1 through B4, and the installation of groundwater monitoring wells MW1 through MW4 in the borings. Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Concentrations of TPHg and total xylenes were reported in the soil samples collected from the borings (ERI, 1995a).

August 1995 ERI observed the drilling of soil borings SW1 and SW2, and construction of air sparge/soil vapor extraction (AS/SVE) wells AS/SVE1 and AS/SVE2 in the

borings. Concentrations of TPHg and BTEX were reported in soil samples collected from the borings (ERI, 1996b).

- October 1995 ERI observed the advancement of one on-site (B5) and two off-site (B6 and B7) Geoprobe borings. Groundwater samples were collected from borings B5 and B6; groundwater was not encountered in boring B7. Groundwater samples from borings B5 and B6 were analyzed for TPHg and BTEX. Petroleum hydrocarbons were not detected at concentrations at or above laboratory reporting limits (ERI, 1995b).
- October 1995 ERI conducted an AS/SVE feasibility test. ERI estimated the radius of influence to be 18 feet (ERI, 1996b).
- March 1996 ERI observed the drilling of soil borings B10 through B14, and installation of AS/SVE wells AS/SVE3 through AS/SVE7 in the borings. Soil samples were not collected from the borings (ERI, 1996a,c).
- May 1996 ERI submitted a remedial action plan for the installation of an AS/SVE remediation system at the site (ERI, 1996c).
- August 1996 The hoists, dispenser islands, and product lines were removed. Samples were not collected during the field work, as approved by the City of Santa Rosa Fire Department (ERI, 1996d).
- October 1996 ERI removed a dry well that was discovered during trenching for the AS/SVE remediation system. The well was constructed with a 6-inch steel casing to a total depth of 25 feet. ERI overexcavated the soil surrounding the dry well in an area 11-feet by 8-feet by 14-feet deep. ERI collected soil samples from the side walls and bottom of the excavation. Concentrations of petroleum hydrocarbons were reported in the samples. Approximately 45 tons of soil from the dry well excavation were removed to BFI Landfill in Livermore, California (ERI, 1997a).
- December 1996 ERI began operation of the AS/SVE system (ERI, 1997b).
- July 1998 ERI discontinued operation of the AS/SVE remediation system. The system removed approximately 345 pounds of TPHg and 17 pounds of benzene. At the time of system shutdown, petroleum hydrocarbon concentrations in influent vapor

samples were below laboratory reporting limits, and dissolved hydrocarbon concentrations in groundwater samples from well MW1 had decreased to below laboratory reporting limits (ERI, 1998).

- April 2000 ERI observed Environ Corporation (under contract with Valero Energy Corporation) advance one Geoprobe boring (GP1) and collect groundwater samples from the boring. Additionally, a groundwater sample was collected from well AS/SVE4. ERI collected duplicate samples during the investigation. Concentrations of TPHg, benzene, and methyl tertiary butyl ether (MTBE) were reported in the grab groundwater samples from well AS/SVE4. Concentrations of MTBE were reported in the groundwater samples from boring GP1 (ERI, 2000a).
- December 2000 ERI performed a sensitive receptor survey. The California Department of Water Resources (DWR) well driller's report archive revealed two municipal and 35 private wells registered within a one-half mile radius of the site. A door-to-door survey and mailings confirmed the locations of 13 wells (ERI, 2000b).
- September and November 2002 ERI installed two on-site groundwater monitoring wells (MW7 and MW8) and two off-site groundwater monitoring wells (MW5 and MW6). Soil samples were analyzed for TPHg, MTBE, and BTEX. Benzene was reported in the soil sample collected from well MW5 at 10 fbgs. Hydrocarbon concentrations were not reported at or above the laboratory reporting limits in the remaining samples (ERI, 2002).
- January 2003 ERI retrofitted the AS/SVE system to operate as a dual-phase extraction (DPE) system, extracting groundwater from the AS casings and vapor from the SVE casings of wells AS/SVE1 through AS/SVE7. Continuous operation of the retrofitted system began on January 28, 2003 (ERI, 2003).
- August and September 2004 ERI observed the advancement of one on-site CPT boring (CPT1) and four off-site CPT borings (CPT2 through CPT5), and collected groundwater samples from adjacent HP borings. Concentrations of TPHg, MTBE, total xylenes, tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) were reported in the groundwater samples (ERI, 2004).

August and

October 2004 ERI collected groundwater samples from an irrigation well at 4389 Sonoma Highway on August 19, 2004. The laboratory analytical results reported a concentration of 3.8 micrograms per liter (ug/L) of MTBE. ERI collected an additional groundwater sample from the irrigation well on October 4, 2004. The laboratory analytical results reported a concentration of 1.3 ug/L of MTBE (ERI, 2005b).

September 2004 ERI performed a door-to-door well survey downgradient and crossgradient of the site to locate wells that may not have been identified during previous sensitive receptor surveys. ERI identified a total of eight additional private wells in the vicinity of the site during this survey (ERI, 2005a).

November 2004 ERI collected groundwater samples from seven domestic wells downgradient of the site. Samples were analyzed for total petroleum hydrocarbons as diesel (TPHd), TPHg, BTEX, methanol, and oxygenated compounds (including MTBE). Hydrocarbon concentrations were not reported at or above the laboratory reporting limit in the samples collected from the domestic wells (ERI, 2005b).

August 2005 The dual-phase extraction system was shut down for repairs and has remained shut down pending evaluation and redesign. In total the AS/SVE and DPE systems removed approximately 560 pounds of TPHg, 18 pounds of benzene, and 10 pounds of MTBE from soil beneath the site; and approximately 0.01 pound of benzene and two pounds of MTBE from groundwater beneath the site during the operational periods (ERI, 2005c).

March 2006 ERI observed the advancement of one on-site CPT boring (CPT8) and collected groundwater samples from an adjacent HP boring (ERI, 2006).

3.0 SITE CONDITIONS

3.1 Chemicals of Concern

Cumulative results of laboratory analyses of groundwater samples (Tables 1A, 1B, 3A, and 3B) and soil samples (Tables 4A and 4B) indicate that concentrations of gasoline-range and diesel-range fuel hydrocarbons, and related constituents are present in soil and groundwater underlying the site. ERI has identified the following constituents as chemicals of concern (COCs): TPHg, BTEX, MTBE, and TBA.

3.2 Site Geology and Hydrogeology

The site is located in the Rincon Valley Subbasin of the Santa Rosa Valley Basin in the North Coast Hydrologic Region (CADWR, 2003). The site is located on sediments mapped as Late Pleistocene Alluvial Fan Deposits, consisting of clay, silt, fine sand, and coarse sand and gravel (CADWR, 2003). The regional groundwater flow direction is to the southwest (CADWR, 1982). Results of quarterly groundwater monitoring indicate that groundwater beneath the site flows towards the southwest, as shown on Plate 3. In 2005, groundwater beneath the site fluctuated from approximately 12 to 20 fbgs.

Exploratory borings indicate the sediments beneath the site and vicinity consist of heterogeneous mixtures of clayey silt, silt, silty and clayey sands, and sandy gravel. Cross sections are presented on Plates 4 and 5. The cross section locations are shown on Plate 6. Based on review of boring logs from previous investigations, ERI interprets the hydrostratigraphy in the site vicinity to consist of a sequence of sandy, water-bearing layers separated by layers of silt and clay mixtures.

Cross sections A-A' and B-B' show that a similar stratigraphic pattern is present beneath the site and vicinity, although the exact depth of the sandy aquifers varies. In boring CPT8, the first, upper water-bearing aquifer is present between 22 to 27 fbgs. An aquitard underlies this upper water-bearing zone from 27 to 36 fbgs, and a second, lower water-bearing sandy aquifer is present from 36 to 40 fbgs. In comparison, in boring CPT1, the sandy unit correlating with the first water-bearing aquifer in boring CPT8 is present from 23 to 28 fbgs; the aquitard is present from 28 to 42 fbgs; and a second water-bearing zone, consisting of sandy silts, is present below approximately 42 fbgs. In off-site boring CPT4, which is at an elevation approximately 4 feet lower than boring CPT8, the upper sandy unit is present from 17 to 26 fbgs, the aquitard is present in 26 to 32 fbgs, and the lower sandy unit is present below 32 fbgs.

Groundwater monitoring wells MW1 through MW8 are screened above 30 fbgs and monitor groundwater conditions in the shallow water-bearing zone (Table 5). ERI proposed the installation of monitoring wells screened over deeper intervals in its *Work Plan for Additional Site Assessment*, dated May 18, 2005. The investigation is currently awaiting the completion of access negotiations.

3.3 Distribution of Residual Petroleum Hydrocarbons in Soil

Historical groundwater depths indicate a vadose zone is present beneath the site to approximately 15 fbgs. Cumulative analytical results of soil samples (Tables 4A and 4B) indicate that residual fuel hydrocarbons were identified in soil in the vicinity of the former USTs, product piping and dispensers, in the vicinity of well MW2, and in the former dry well located adjacent to well AS/SVE6. The highest hydrocarbon concentrations in soil occur in the samples collected from the dry well excavation. TPHg was

reported at a concentration of 2,500 milligrams per kilogram (mg/kg) in the sample collected from the dry well excavation at 10.5 fbgs, and 2,100 mg/Kg in the sample collected at the base of the dry well excavation at 14 fbgs. Benzene, toluene, ethylbenzene, and total xylenes were reported at maximum concentrations of 8.7 mg/Kg, 100 mg/Kg, 49 mg/Kg, and 260 mg/Kg, respectively, in the sample collected from the base of the dry well excavation at 14 fbgs.

3.4 Distribution of Dissolved-Phase Petroleum Hydrocarbons in Groundwater

3.4.1 Historical Groundwater Monitoring and Sampling

Cumulative groundwater monitoring and sampling data indicates that the maximum historical concentration of TPHg in on-site wells was 47,000 ug/L in well MW2 in February 1995. TPHg has been detected on one occasion in the off-site wells, at a concentration of 63.7 ug/L in MW6 in July 2003. The maximum historical benzene concentration in on-site wells was 5,100 ug/L in well MW2 in February 1995; benzene has not been detected in the off-site wells. The maximum historical MTBE concentration in on-site and off-site wells was 30,000 ug/L in well MW1 in July 2001, and 57.9 ug/L in well MW6 in July 2003, respectively. The maximum historical TBA concentration in on-site wells was 11,200 ug/L in MW1 in February 2005; TBA has not been detected in the off-site wells.

Results of quarterly groundwater sampling at the site indicate petroleum hydrocarbon concentrations in groundwater have shown a decreasing trend over time. Concentrations of TPHg and benzene have decreased to below laboratory reporting limits in samples collected from groundwater monitoring wells except wells MW1 and MW4. Concentrations of MTBE reported in samples collected from monitoring wells have decreased from a maximum of 30,000 ug/L in well MW1 on July 9, 2001, to 200 ug/L in well MW4 on March 30, 2006.

Sampling for TPHd was initiated in June 2005 at the request of the Regional Board, due to a reported concentration of TPHd in a remedial system sample. Concentrations of TPHd have not been reported in on-site or off-site monitoring wells since sampling was initiated.

3.4.2 Recent Groundwater Monitoring and Sampling

Concentrations of TPHg and benzene were not reported above laboratory method reporting limits in on-site or off-site wells during the most recent groundwater monitoring and sampling event (March 30, 2006), as shown on Plate 7. The maximum MTBE concentration in on-site and off-site wells was 199 ug/L in well MW4, and 30.0 ug/L in well MW5, respectively. The maximum TBA concentration was 223 ug/L in well MW1; TBA was not reported in off-site wells.

3.4.3 Results of Cone Penetration Test Borings

In 2004, ERI conducted a groundwater investigation by advancing and sampling five paired CPT and HP borings (CPT1 through CPT5, and HP1 through HP5). Eleven grab groundwater samples were collected from the five HP borings. ERI conducted an additional groundwater investigation in March 2006 by advancing one paired CPT and HP boring (CPT8 and HP8). Three grab groundwater samples were collected from boring HP8, at depths of 24, 38, and 56 fbgs. Concentrations of TPHg and MTBE were reported in samples collected from depths up to 56 fbgs on site and off site to the southwest. Grab groundwater sample analytical data are summarized in Tables 3A and 3B. Select grab groundwater sample analytical data are presented on Plate 7.

Concentrations of TPHg, MTBE, TBA, and TAME were reported in grab groundwater samples collected from shallow and intermediate water-bearing zones in HP borings on site and downgradient of the site. The maximum TPHg concentrations occurred in off-site boring HP4 at 36 and 42 fbgs (3,240 and 3,920 ug/L, respectively). The maximum MTBE concentrations occurred in boring HP4 at 36 and 42 fbgs (5,200 and 6,450 ug/L, respectively). Concentrations of MTBE were also reported in boring HP1 at 42 fbgs (6,100 ug/L) and boring HP8 at 24 fbgs (1,000 ug/L). The maximum TBA concentration occurred in boring HP8 at 24 fbgs (4,400 ug/L). Concentrations of TBA were also detected in boring HP8 at 38 fbgs (1,200 ug/L), boring HP4 at 36 fbgs (1,620 ug/L), and boring HP4 at 42 fbgs (602 ug/L).

Concentrations of petroleum hydrocarbons were reported in samples collected from water-bearing depth intervals in on-site borings HP1, and HP8, and showed a decreasing trend with depth. In boring HP8, concentrations of the two analytes with the maximum concentrations (MTBE and TBA) decreased by two orders of magnitude from 24 to 56 fbgs. Concentrations of MTBE were reported in boring HP8 at 1,000 ug/L (24 fbgs), 80 ug/L (38 fbgs), and 17 ug/L (56 fbgs). Concentrations of TBA were reported in boring HP8 at 4,400 ug/L (24 fbgs), 930 ug/L (38 fbgs), and 42 ug/L (56 fbgs). Total petroleum hydrocarbons as gasoline were reported in boring HP8 at 420 ug/L in the sample collected at 38 fbgs. Below 50 fbgs, the maximum TPHg concentration was 197 ug/L in boring HP1 at 54 fbgs; the maximum MTBE concentration was 80.9 ug/L in boring HP1 at 54 fbgs; and the maximum TBA concentration was 42 ug/L in boring HP8 at 56 fbgs. Based on the current COC concentrations in groundwater monitoring wells and from grab groundwater samples collected from the HP borings, concentrations of TPHg, MTBE, and TBA exceed water quality goals established by the Regional Board.

3.5 Source Areas

The distribution of residual and dissolved hydrocarbons in soil and groundwater indicate the following:

- The USTs, dispensers, and dry well appear to have been the primary source of residual hydrocarbons in soil beneath the site.
- Soil surrounding the former USTs, dispensers, and dry well was overexcavated; however, residual hydrocarbons were present in soil samples collected at the base of the excavations. Residual hydrocarbons remaining in soil in the vicinity of the former USTs, dispensers, and dry well may have been a secondary source of dissolved hydrocarbons to groundwater.

3.6 Sensitive Receptors

3.6.1 Private Wells

In July 2004, ERI and the Regional Board were informed of an irrigation well at 4389 Sonoma Highway. ERI collected groundwater samples from the irrigation well on August 19, 2004. Laboratory analysis of the groundwater samples collected from the irrigation well at 4389 Sonoma Highway on August 19, 2004, reported MTBE at a concentration of 3.8 ug/L using EPA Method 524.2.

ERI collected an additional groundwater sample from the irrigation well at 4389 Sonoma Highway on October 4, 2004. In addition, ERI reviewed the SRS to identify additional wells in the vicinity of the subject site. In September 2004, ERI performed a door-to-door well survey of properties located downgradient of the subject site. In addition to the well at 4389 Sonoma Highway, the door-to-door survey revealed eight wells located downgradient of the subject site, as shown on Plate 8.

ERI negotiated access to and sampled all eight wells. Initial samples were collected from the wells on November 3, 2004, with the exception of 4344 Sonoma Highway, which was sampled upon completion of access negotiations on July 28, 2005. The property owner granted access to the well at 4344 Sonoma Highway for a one-time-only sampling event. Groundwater samples collected from the domestic wells were submitted to TestAmerica Analytical Testing Corporation (TestAmerica), a California state-certified laboratory, under Chain-of-Custody protocol, for analysis of TPHd, TPHg, and methanol using EPA Method 8015B; and BTEX, oxygenated compounds (MTBE, ethyl tertiary butyl ether [ETBE], di-isopropyl ether [DIPE], TAME, and TBA), and lead scavengers (1,2-dichloroethane [1,2-DCA] and 1,2-dibromoethane [EDB]) using EPA Method 524.1.

The laboratory analysis of the initial groundwater samples collected from the irrigation well located at 4389 Sonoma Highway detected concentrations of 3.8 ug/L and 1.3 ug/L of MTBE on August 19, 2004, and October 4, 2004, respectively. Petroleum hydrocarbons and oxygenated compounds were not reported at or above laboratory reporting limits in initial groundwater samples collected from wells located at 4420 (A and B wells), 4372, 4358, 4344, 4200, 4100, and 4343 Sonoma Highway, and have not been reported in samples collected during ongoing monitoring of these wells.

ERI samples the wells located at 4389 and 4343 Sonoma Highway on a quarterly basis. ERI samples the wells at 4200, 4358, 4372, 4420 (A and B wells) Sonoma Highway on a semi-annual basis during the first and third quarters. During the most recent quarter (first quarter 2006), no requested analytes were reported at or above laboratory reporting limits in groundwater samples collected from the private wells. Cumulative analytical results of groundwater samples collected from the private wells are summarized in Tables 2A and 2B. Select groundwater analytical results for samples collected from the private wells during first quarter 2006 are shown on Plate 8.

3.6.2 Surface Water

Santa Rosa Creek is the nearest surface water body, located approximately 700 feet south of the site. Brush Creek is located approximately 1,200 feet northwest of the site. Ducker Creek is located approximately 2,000 feet north of the site. Lake Ralphine is located approximately 2,000 feet southeast of the site.

3.7 Current and Potential Beneficial Uses of Surface and Groundwater

The site is located in the Rincon Valley Subbasin of the Santa Rosa Valley Basin in the North Coast Hydrologic Region (CADWR, 2003). According to the Sonoma County Water Agency (SCWA), the Russian River, approximately 6 miles west of the subject site, is the primary water source for the City of Santa Rosa (SCWA, 2004), and groundwater is used as an additional source. Municipal supply wells were not located within one-half mile of the subject site. Private wells in the vicinity of the site are used for various purposes, including drinking and irrigation.

4.0 SUMMARY OF REMEDIAL ACTIONS

4.1 AS/SVE Feasibility Testing

In October 1995, ERI conducted an AS/SVE feasibility test. ERI performed two SVE pilot tests during this event: 1) using AS/SVE1 as the extraction well and AS/SVE2, MW1, and MW2 as observation wells; and

2) using AS/SVE2 as the extraction well and AS/SVE1, MW1, and MW2 as observation wells (ERI, 1996). A vacuum of 0.5 inches of water (inH₂O) was used as a basis for determining an effective vacuum radius of influence during the tests. Induced vacuum readings of 0.5 inH₂O were observed at distances ranging from 17 to 24 feet from the extraction well during the tests; therefore, ERI determined the SVE radius of influence to be 17 feet.

Following the vapor extraction tests, ERI conducted an air sparge feasibility test using well AS/SVE2 as the injection well and wells AS/SVE1, MW1, and MW2 as observation wells. Positive pressure measurements of 0.5 inH₂O was used as a basis for determining the effective sparge radius of influence. Induced pressure readings of 0.5 inH₂O were observed at a distance of 19 feet from the injection well during the test; therefore, ERI determined the AS radius of influence to be 19 feet.

Following the individual AS and SVE pilot tests, ERI conducted a combined AS/SVE test, using well AS/SVE2 as the combined injection and vacuum well, and wells AS/SVE1, MW1, and MW2 as observation wells. ERI determined the combined AS/SVE radius of influence to be 18 feet.

ERI concluded that AS/SVE was an effective remedial technology, and recommended installation of five additional AS/SVE wells (AS/SVE3 through AS/SVE7) and an AS/SVE system.

4.2 AS/SVE System Operation

In July 1996, ERI installed an AS/SVE system at the site. ERI operated the AS/SVE system from December 1996 to July 1998. The AS/SVE system was shut down on July 22, 1998, due to low influent concentrations. The AS/SVE system removed 345 pounds of TPHg and 17 pounds of benzene from the subsurface during its operational period.

4.3 System Retrofit to Dual-Phase Extraction

In 2001, in response to increasing dissolved MTBE concentrations observed during quarterly monitoring and sampling events, ERI retrofitted the AS/SVE system at the site. ERI retrofitted the AS casings of wells AS/SVE1 through AS/SVE7 to allow dual-phase extraction through 1-inch dip tubes inserted through the air sparge casings, powered by two rotary vane blowers.

ERI started up the retrofitted system on January 28, 2003, and continuous operation of the system began in June 2003. The DPE and SVE systems were shut down on August 25, 2005, for rotary vane blower repairs, and have remained down pending redesign of the remedial approach for the site. The AS/SVE

and DPE systems have removed a total of approximately 561.01 pounds of TPHg, 18.75 pounds of benzene, and 13.05 pounds of MTBE from the subsurface during the cumulative operational periods (ERI, 2005c). Operational and performance data for the DPE and SVE systems are summarized in Tables 6 and 7, respectively.

5.0 EVALUATION OF REMEDIAL ACTIONS

5.1 Groundwater Cleanup Objectives

ERI proposes to apply the water quality objectives for groundwater used for domestic or municipal supply as listed in Table 3-2 of the Regional Board's Basin Plan (Appendix B) as clean-up objectives. These objectives are consistent with the existing and potential beneficial uses of groundwater and surface water in the area.

5.2 Effectiveness of Past Remediation

The AS/SVE and DPE systems together removed approximately 561.01 pounds of TPHg, 18.75 pounds of benzene, and 13.05 pounds of MTBE from the subsurface during the cumulative operational periods. A total of 379,305 gallons of groundwater were extracted, treated, and discharged by the existing DPE system. Declining influent concentrations prior to the system shutdown indicate the existing DPE system has been effective in reducing dissolved hydrocarbon concentrations in the targeted groundwater zone beneath the site. Assessment data from more recent CPT investigations indicates a modification of the remedial approach for the site is warranted.

The air sparge wells, which are currently retrofitted as DPE wells and used for groundwater extraction, are screened in shallow groundwater (above 25 fbgs). Analysis of groundwater samples collected from borings CPT1, CPT4, and CPT8 reported dissolved hydrocarbons in the deeper interval from 36 to 42 fbgs. In the groundwater sample collected from boring CPT1 at 42 fbgs, MTBE was reported at a concentration of 6,100 ug/L. In the groundwater sample collected from boring CPT4 at 42 fbgs, TPHg was reported at 3,920 ug/L; MTBE was reported at 6,450 ug/L; and TBA was reported at 4,400 ug/L. In the groundwater sample collected from boring CPT8 at 38 fbgs, TPHg was reported at a concentration of 420 ug/L, and MTBE was reported at 80 ug/L. The air sparge wells were not constructed to remediate dissolved hydrocarbons in the deeper zone. Additionally, the current remediation system was designed to target the shallow water-bearing zone in the vicinity of the USTs and dispensers; extraction wells do not currently exist near CPT1.

In the groundwater sample collected from boring HP8 at 24 fbs, dissolved MTBE and TBA were reported at concentrations of 1,000 ug/L and 4,400 ug/L, respectively. Although declining dissolved hydrocarbon concentrations indicate the DPE system has effectively removed dissolved hydrocarbons from shallow groundwater beneath the site, these results indicate continued remediation is warranted in this area.

6.0 PROPOSED REMEDIAL ACTION

ERI proposes to continue remediation of dissolved hydrocarbons in the shallow water-bearing zone and implement remediation in the intermediate water-bearing zone using groundwater extraction and treatment. The remediation system will be designed to remove hydrocarbons from the shallow and intermediate water-bearing zones in the vicinity of boring HP8 and from the intermediate water-bearing zone in the vicinity of boring HP1. Additionally, groundwater extraction and treatment will provide groundwater migration control to prevent off-site migration of dissolved hydrocarbons in groundwater.

Groundwater extraction will occur through three groundwater recovery wells: RW1A, RW1B, and RW2B. Wells RW1A and RW1B will be screened in the shallow and intermediate water-bearing zones, respectively, in the vicinity of boring HP8. Well RW2B will be screened in the intermediate water-bearing zone in the vicinity of boring HP1. Because the interval corresponding to the shallow water-bearing zone was dry in boring HP1, no extraction well is planned in the shallow zone in this area.

Groundwater will be extracted from the wells using submersible electric pumps. Extracted groundwater will be directed through particulate filters for removal of suspended sediment, and treated with granular activated carbon (GAC) vessels prior to discharge to the sanitary sewer under permit by the City of Santa Rosa. The existing DPE remediation equipment will be decommissioned to allow space in the remediation compound for the groundwater extraction and treatment system equipment; however, the remediation system wells will remain in place.

7.0 WORK PLAN FOR RECOVERY WELL INSTALLATION

ERI proposes to install one recovery well in the shallow water-bearing zone (RW1A) and two recovery wells in the intermediate water-bearing zone (RW1B and RW2B). Proposed recovery well locations are shown on Plate 2. Work will be performed in accordance with this Work Plan, ERI's Field Protocol (Attachment C), and a site-specific Health and Safety Plan. The specific proposed tasks are summarized in the following subsections.

7.1 Pre-Drilling Activities

As part of pre-drilling activities, ERI will:

- Obtain drilling permits from the Sonoma County Department of Health Services Environmental Health Division (the County).
- Contact Underground Service Alert (USA) and a private utility locating contractor to coordinate utility locating activities.

7.2 Drilling, Sampling, and Well Installation

As part of recovery well installation activities, ERI will:

- Observe the coring of the pavement at the desired locations.
- Obtain the services of a licensed well driller and observe the clearance of each boring using a hand-auger or vacuum excavation equipment to 8 fbgs, as required by Exxon Mobil.
- Observe the drilling and installation of recovery wells RW1A, RW1B, and RW2B using a hollow-stem auger drilling rig. Soil samples will be collected at approximately 5-foot intervals from the borings, and continuously across the anticipated screen intervals.
- Observe installation of well RW1A to a total depth of 28.5 fbgs, with blank polyvinyl chloride (PVC) casing from 28.5 to 28 fbgs, and slotted screen from 28 to 13 fbgs. This screen interval will capture groundwater from the upper water-bearing zone. The electric submersible pump is approximately 3 feet in length, with the inlet valve approximately 18 inches from the bottom of the pump. When the pump rests on the bottom of the well, this will position the inlet valve approximately 1 foot from the bottom of the well screen, which is the preferred location for maximum groundwater recovery. A schematic showing the proposed well construction details and pump placement is provided on Plate 9.
- Observe installation of well RW1B to a total depth of 41 fbgs, with blank PVC casing from 41 to 40.5 fbgs, and slotted screen from 40.5 to 35.5 fbgs. This screen interval will capture groundwater from the intermediate water-bearing zone, and position the electric submersible pump in the preferred location for maximum groundwater recovery, with the inlet approximately 1 foot above the bottom of the screened interval. A schematic showing the proposed well construction details and pump placement for RW1B is provided in Plate 10.

- Observe installation of well RW2B to a total depth of 50.5 fbgs, with blank PVC casing from 50.5 to 50 fbgs, and slotted screen from 50 to 40 fbgs. This screen interval will capture groundwater from the intermediate water-bearing zone and position the electric submersible pump in the preferred location for maximum groundwater recovery, with the inlet approximately 1 foot above the bottom of the screened interval. A schematic showing the proposed well construction details and pump placement for RW2B is provided in Plate 11.
- Submit select soil samples for laboratory analysis for TPHd, TPHg, and methanol using EPA Method 8015B; and MTBE, BTEX, DIPE, ETBE, TAME, TBA, 1,2-DCA, EDB, and ethanol using EPA Method 8260B.
- Develop the newly installed wells by use of a surge block and pump, and collect groundwater samples from the wells at least 24 hours after well development. ERI will submit groundwater samples for laboratory analysis for TPHd, TPHg, and methanol using EPA Method 8015B; and MTBE, BTEX, DIPE, ETBE, TAME, TBA, 1,2-DCA, EDB, and ethanol using EPA Method 8260B. Well development water will be temporarily stored on site pending disposal.
- Contract with a licensed land surveyor to survey the location (known survey grid) and casing elevation (mean sea level) of the borings and newly installed wells, pursuant to AB 2886 standards.
- Store waste soil on site in drums or on, and covered by, plastic sheeting pending characterization and disposal, and contain and store rinsate water on site in drums pending disposal. ERI will collect one composite soil sample (four brass sleeves) from the soil stockpile for laboratory analysis. Upon receipt of analytical results for the stockpiled soil, ERI will apprise Exxon Mobil of disposal options, and coordinate the disposal of the soil at an appropriate disposal facility selected and approved by Exxon Mobil.

7.3 Report Preparation

ERI will prepare a report for the installation of the recovery wells. The report will detail field activities, sample collection, field observations, and analytical results for soil and groundwater samples.

8.0 LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for Exxon Mobil, and any reliance on this report by third parties shall be at such party's sole risk.

Vicinity of Former Exxon Service Station 7-3035, 4501 Sonoma Highway, Santa Rosa, California.
Environmental Resolutions, Inc. (ERI). October 13, 2005c. Groundwater Monitoring and Remediation Status Report, Third Quarter 2005, Former Exxon Service Station 7-3035, 4501 Sonoma Highway, Santa Rosa, California.

Environmental Resolutions, Inc. (ERI). October 2005d. Addendum to Work Plan for Additional Assessment, Former Exxon Service Station 7-3035, 4501 Sonoma Highway, Santa Rosa, California.

Environmental Resolutions, Inc. (ERI). June 12, 2006. Groundwater Assessment Report, Former Exxon Service Station 7-3035, 4501 Sonoma Highway, Santa Rosa, California.

RESNA Industries, Inc. (RESNA). June 2, 1994. Soil Sampling Results Underground Storage Tanks, Dispenser, and Associated Product Lines Removal, Exxon Station 7-3035, 4501 Sonoma Highway, Santa Rosa, California.

Sonoma County Water Agency (SCWA). November 1, 2004. Water Supply Workshop Staff Report (available on line at <http://www2.scwa.ca.gov/docushare/dsweb/Get/Document-1199>).

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 6)

Well ID	Sampling Date	TOC (feet)	DTW (fbgs)	GW Elev. (feet)	SUBJ	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW1	12/01/94	235.81	18.21	217.60	NLPH	---	2,100	---	---	23*	<10	<10	<10
MW1	02/22/95	235.81	14.48	221.33	NLPH	---	150	---	---	5.9	0.67	1.1	2.5
MW1	04/10/95	235.81	13.38	222.43	NLPH	---	190	---	---	<1.0	<1.0	<1.0	<1.0
MW1	07/05/95	235.81	19.67	216.14	NLPH	---	140	---	---	<0.5	<0.5	<0.5	<0.5
MW1	10/17/95	235.81	22.81	213.00	NLPH	---	59	---	---	<0.5	<0.5	<0.5	<0.5
MW1	01/05/96	235.81	18.26	217.55	NLPH	---	<100	---	---	<1.0	<1.0	<1.0	<1.0
MW1	04/15/96	235.81	16.00	219.81	NLPH	---	190	---	---	5.5	<0.5	<0.5	<0.5
MW1	07/16/96	235.81	19.98	215.83	NLPH	---	120	---	---	6.0	<0.5	<0.5	<0.5
MW1	10/02/96	235.81	23.22	212.59	NLPH	---	93	---	---	<0.5	<0.5	<0.5	<0.5
MW1	01/02/97	235.81	11.87	223.94	NLPH	---	60	3,100	---	<0.5	<0.5	<0.5	<0.5
MW1	04/03/97	235.81	18.36	217.45	NLPH	---	<50	19	---	<0.5	<0.5	<0.5	<0.5
MW1	07/03/97	235.81	20.07	215.74	NLPH	---	<50	2.7	---	<0.5	<0.5	<0.5	<0.5
MW1	10/02/97	235.81	22.15	213.66	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW1	01/09/98	235.81	16.48	219.33	NLPH	---	<50	3.6	---	<0.5	<0.5	<0.5	<0.5
MW1	04/01/98	235.81	14.78	221.03	NLPH	---	<50	40	40	<0.5	<0.5	<0.5	<0.5
MW1	07/02/98	235.81	18.58	217.23	NLPH	---	<50	71	---	<0.5	<0.5	<0.5	<0.5
MW1	10/01/98	235.81	21.00	214.81	NLPH	---	<50	120	---	<0.5	<0.5	<0.5	<0.5
MW1	01/07/99	235.81	20.72	215.09	NLPH	---	<500	12,000	---	<5.0	<5.0	<5.0	<5.0
MW1	04/07/99	235.81	14.79	221.02	NLPH	---	<2,500	4,530	5,010	<25	<25	<25	<25
MW1	07/13/99	235.81	21.30	214.51	NLPH	---	<50	3,190	---	<0.5	<0.5	<0.5	<0.5
MW1	10/28/99	235.81	20.31	215.50	NLPH	---	<50	590	---	<1	<1	<1	<1
MW1	02/23/00	235.81	11.69	224.12	NLPH	---	<50	600	420	<0.5	<0.5	<0.5	<0.5
MW1	05/30/00	235.81	11.93	223.88	NLPH	---	<50	7,200	7,800	<0.5	<0.5	<0.5	<0.5
MW1	6/16/00	235.81	Property transferred to Valero Refining Company.										
MW1	07/24/00	235.81	20.40	215.41	NLPH	---	<250	26,000	26,000	<2.5	<2.5	<2.5	<2.5
MW1	10/06/00	235.81	21.62	214.19	NLPH	---	<50	8,700	6,600	<0.5	<0.5	<0.5	<0.5
MW1	01/05/01	235.81	22.14	213.67	NLPH	---	<250	16,000	18,000	<0.5	<0.5	<0.5	<0.5
MW1	04/09/01	235.81	18.36	217.45	NLPH	---	<50	24,000	23,000	<0.5	<0.5	<0.5	<0.5
MW1	07/09/01	235.81	21.31	214.50	NLPH	---	250	30,000	27,000	<0.5	<0.5	<0.5	<0.5
MW1	10/01/01	235.81	22.54	213.27	NLPH	---	<50	17,000	18,000	<0.5	1.8	<0.5	<0.5
MW1	Nov-2001	236.72	Well surveyed in compliance with AB 2886 requirements.										
MW1	01/03/02	236.72	10.23	226.49	NLPH	---	765	972	1,190	0.80	1.30	0.50	4.00
MW1	04/11/02	236.72	19.00	217.72	NLPH	---	30,500	---	22,500	0.70	<0.50	<0.50	<0.50
MW1	07/05/02	236.72	21.34	215.38	NLPH	---	17,100	19,700	20,800	<50.0	<50.0	<50.0	<50.0
MW1	10/07/02	236.72	21.59	215.13	NLPH	---	6,750	11,500	11,000	<0.5	<0.5	<0.5	0.9
MW1	01/24/03	236.72	12.60	224.12	NLPH	---	2,540	2,340	2,580	<0.5	<0.5	<0.5	<0.5
MW1	04/07/03	236.72	17.11	219.61	NLPH	---	3,480	4,280	4,640	<0.50	<0.5	<0.5	<0.5
MW1	07/11/03 b	236.72	19.55	217.17	NLPH	---	3,530	3,580	4,630	<0.50	<0.5	<0.5	<0.5
MW1	10/02/03	236.72	21.92	214.80	NLPH	---	1,320	1,240	1,610	<0.50	<0.5	<0.5	<0.5
MW1	01/09/04	236.72	13.40	223.32	NLPH	---	215	293	320	<0.50	<0.5	<0.5	<0.5
MW1	04/06/04	236.72	25.23	211.49	NLPH	---	7,270	10,000	7,260	0.80	<0.5	<0.5	<0.5
MW1	08/25/04	236.72	23.59	213.13	NLPH	---	<50.0	9.1	8.50	<0.50	<0.5	<0.5	<0.5
MW1	11/15/04	236.72	25.68	211.04	NLPH	---	9,780	8,420	9,900	<0.50	<0.5	1.2	2.9
MW1	02/17/05	236.72	18.63	218.09	NLPH	---	1,320	---	1,620	<0.50	<0.5	<0.5	0.8
MW1	06/07/05	236.72	17.29	219.43	NLPH	<50	314	---	446	<0.50	<0.5	<0.5	<0.5
MW1	09/08/05	236.72	20.51	216.21	NLPH	<50.0	<50.0	68.5	82.3	<0.50	<0.50	<0.50	<1.00
MW1	12/08/05	236.72	19.20	217.52	NLPH	<50.0	71.5	57.2	66.7	<0.50	<0.50	<0.50	<0.50
MW1	03/30/06	236.72	12.71	224.01	NLPH	<47	<50	43	34.9	<0.50	<0.50	<0.50	<0.50

TABLE 1A
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Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 6)

Well ID	Sampling Date	TOC (feet)	DTW (fbgs)	GW Elev. (feet)	SUBJ	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW2	12/01/94	234.86	16.37	218.49	NLPH	---	1,600	---	---	640	<4	18	34
MW2	02/22/95	234.86	11.27	223.59	NLPH	---	47,000	---	---	5,100	3,200	1,800	6100
MW2	04/10/95	234.86	9.65	225.21	NLPH	---	22,000	---	---	2,500	590	1,100	2400
MW2	07/05/95	234.86	17.93	216.93	NLPH	---	1,100	---	---	45	<5.0	19	<5.0
MW2	10/17/95	234.86	21.33	213.53	NLPH	---	<1,000	---	---	<10	<10	<10	<10
MW2	01/05/96	234.86	16.08	218.78	NLPH	---	3,600	---	---	390	<13	140	22
MW2	04/15/96	234.86	12.81	222.05	NLPH	---	9,600	---	---	470	<50	410	100
MW2	07/16/96	234.86	18.55	216.31	NLPH	---	640	---	---	24.0	<2.5	<2.5	<2.5
MW2	10/02/96	234.86	21.95	212.91	NLPH	---	660	---	---	6.0	1.4	<1.2	<1.2
MW2	01/02/97	234.86	7.41	a	NLPH	---	1,900	15,000	---	370	<5.0	<5.0	22
MW2	04/03/97	234.86	13.28	221.58	NLPH	---	<1,250	6,500	---	<12	<12	<12	<12
MW2	07/03/97	235.00	14.67	220.33	NLPH	---	<50	2,900	3,900	1.7	<0.5	<0.5	0.91
MW2	10/02/97	235.79	16.03	219.76	NLPH	---	<50	140	---	<0.5	<0.5	<0.5	<0.5
MW2	01/09/98	235.79	13.61	222.18	NLPH	---	60	1,100	---	<0.5	<0.5	<0.5	<0.5
MW2	04/01/98	235.79	11.84	223.95	NLPH	---	170	1,900	1,900	6.4	<0.5	<0.5	<0.5
MW2	07/02/98	235.79	16.49	219.30	NLPH	---	190	2,800	---	<1.0	<1.0	<1.0	<1.0
MW2	10/01/98	235.79	18.00	217.79	NLPH	---	180	750	---	<0.5	<0.5	<0.5	<0.5
MW2	01/07/99	235.79	20.35	215.44	NLPH	---	150	1,200	---	<0.5	1.3	<0.5	<0.5
MW2	04/07/99	235.79	12.20	223.59	NLPH	---	<1,000	1,770	---	<10	<10.0	<10.0	<10.0
MW2	07/13/99	235.79	19.40	216.39	NLPH	---	199	500	---	0.897	<0.5	<0.5	<0.5
MW2	10/28/99	235.79	17.09	218.70	NLPH	---	<250	19,000	---	<5	<5	<5	<5
MW2	02/23/00	235.79	11.27	224.52	NLPH	---	260	8,800	6,500	<0.5	<0.5	<0.5	<0.5
MW2	05/30/00	235.79	11.09	224.70	NLPH	---	260	2,000	2,000	<0.5	<0.5	<0.5	<0.5
MW2	06/16/00	235.79	Property transferred to Valero Refining Company.										
MW2	07/24/00	235.79	17.10	218.69	NLPH	---	150	2,100	2,000	<0.5	<0.5	<0.5	<0.5
MW2	10/06/00	235.79	18.62	217.17	NLPH	---	150	1,800	1,200	<0.5	<0.5	<0.5	0.84
MW2	01/05/01	235.79	21.51	214.28	NLPH	---	74	510	530	<0.5	<0.5	<0.5	<0.5
MW2	04/09/01	235.79	16.63	219.16	NLPH	---	<50	490	510	<0.5	<0.5	<0.5	<0.5
MW2	07/09/01	235.79	19.64	216.15	NLPH	---	<50	430	360	<0.5	<0.5	<0.5	<0.5
MW2	10/01/01	235.79	20.69	215.10	NLPH	---	<50	360	390	<0.5	<0.5	<0.5	<0.5
MW2	Nov-2001	235.77	Well surveyed in compliance with AB 2886 requirements.										
MW2	01/03/02	235.77	8.47	227.30	NLPH	---	483	510	621	<0.50	<0.50	<0.50	<0.50
MW2	04/11/02	235.77	16.18	219.59	NLPH	---	188	---	171	<0.50	<0.50	<0.50	<0.50
MW2	07/05/02	235.77	20.24	215.53	NLPH	---	280	240	208	<5.0	<5.0	<5.0	<5.0
MW2	10/07/02	235.77	19.15	216.62	NLPH	---	92.3	13.1	134	<0.5	<0.5	<0.5	<0.5
MW2	01/24/03	235.77	10.16	225.61	NLPH	---	128	116	118	<0.5	<0.5	<0.5	<0.5
MW2	04/07/03	235.77	14.40	221.37	NLPH	---	<50.0	33.5	35.0	<0.50	<0.5	<0.5	<0.5
MW2	07/11/03 b	235.77	18.42	217.35	NLPH	---	<50.0	20.8	22.4	<0.50	<0.5	<0.5	<0.5
MW2	10/02/03	235.77	20.43	215.34	NLPH	---	<50.0	10.2	11.6	<0.50	<0.5	<0.5	<0.5
MW2	01/09/04	235.77	10.78	224.99	NLPH	---	<50.0	10.0	9.80	<0.50	<0.5	<0.5	<0.5
MW2	04/06/04	235.77	20.25	215.52	NLPH	---	d	d	d	d	d	d	d
MW2	08/25/04	235.77	19.14	216.63	NLPH	---	<50.0	1.0	0.90	<0.50	<0.5	<0.5	<0.5
MW2	11/15/04	235.77	22.70	213.07	NLPH	---	<50.0	3.1	2.10	<0.50	<0.5	<0.5	1.3
MW2	02/17/05	235.77	17.55	218.22	NLPH	---	<50.0	---	0.80	<0.50	<0.5	<0.5	<0.5
MW2	06/07/05	235.77	17.08	218.69	NLPH	<51	<50.0	---	<0.50	<0.50	<0.5	<0.5	<0.5
MW2	09/08/05	235.77	19.04	216.73	NLPH	<50.0	<50.0	3.91	0.890	<0.50	<0.50	<0.50	<1.00

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 3 of 6)

Well ID	Sampling Date	TOC (feet)	DTW (fbgs)	GW Elev. (feet)	SUBJ	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW2	12/08/05	235.77	18.00	217.77	NLPH	<50.0	<50.0	<0.50	0.570	<0.50	<0.50	<0.50	<0.50
MW2	03/30/06	235.77	10.48	225.29	NLPH	<47	<50	<2.5	<0.500	<0.50	<0.50	<0.50	<0.50
MW3	12/01/94	233.13	14.43	218.70	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW3	02/22/95	233.13	9.73	223.40	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW3	04/10/95	233.13	8.76	224.37	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW3	07/05/95	233.13	15.28	217.85	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW3	10/17/95	233.13	19.09	214.04	NLPH	---	<50	---	---	2.1	<0.5	0.89	<1.0
MW3	01/05/96	233.13	14.00	219.13	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW3	04/15/96	233.13	11.18	221.95	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW3	07/16/96	233.13	16.53	216.60	NLPH	---	<50	---	---	0.90	3.4	0.62	3.0
MW3	10/02/96 c	233.13	---	---	---	---	---	---	---	---	---	---	---
MW3	01/02/97	233.13	6.99	a	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW3	04/03/97	233.13	12.03	221.10	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW3	07/03/97	233.13	16.33	216.80	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW3	10/02/97	233.13	17.73	215.40	NLPH	---	180	51	---	2.8	<0.5	<0.5	<0.5
MW3	01/09/98	233.13	11.14	221.99	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW3	04/01/98	233.13	9.76	223.37	NLPH	---	<50	<2.5	<2.0	<0.5	<0.5	<0.5	<0.5
MW3	07/02/98	233.13	14.25	218.88	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW3	10/01/98	233.13	17.03	216.10	NLPH	---	110	13	---	3.3	0.71	<0.5	1.6
MW3	01/07/99	233.13	16.83	216.30	NLPH	---	<50	16	---	0.57	<0.5	0.60	1.7
MW3	04/07/99	233.13	9.89	223.24	NLPH	---	<50	<2.0	---	<0.5	<0.5	<0.5	<0.5
MW3	07/13/99	233.13	16.90	216.23	NLPH	---	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW3	10/28/99	233.13	17.55	215.58	NLPH	---	<50	<1	---	<1	<1	<1	<1
MW3	02/23/00	233.13	11.87	221.26	NLPH	---	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW3	05/30/00	233.13	11.33	221.80	NLPH	---	<50	<2	<5	<0.5	<0.5	<0.5	<0.5
MW3	06/16/00	233.13	Property transferred to Valero Refining Company.										
MW3	07/24/00	233.13	15.48	217.65	NLPH	---	<50	3.4	15	<0.5	<0.5	<0.5	<0.5
MW3	10/06/00	233.13	17.53	215.60	NLPH	---	<50	<2	---	1.5	1.6	0.78	3.8
MW3	01/05/01	233.13	18.31	214.82	NLPH	---	51	<2	---	3.2	2.4	1.1	4.5
MW3	04/09/01	233.13	13.23	219.90	NLPH	---	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW3	07/09/01	233.13	16.57	216.56	NLPH	---	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW3	10/01/01	233.13	19.99	213.14	NLPH	---	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW3	Nov-2001	233.08	Well surveyed in compliance with AB 2886 requirements.										
MW3	01/03/02	233.08	6.00	227.08	NLPH	---	<50.0	1.6	1.94	<0.50	0.70	<0.50	2.40
MW3	04/11/02	233.08	13.16	219.92	NLPH	---	<50.0	---	0.6	<0.50	<0.50	<0.50	<0.50
MW3	07/05/02	233.08	15.10	217.98	NLPH	---	<50.0	<0.5	---	<0.5	<0.5	<0.5	1.0
MW3	10/07/02	233.08	16.84	216.24	NLPH	---	<50.0	1.4	1.20	<0.5	<0.5	<0.5	<0.5
MW3	01/24/03	233.08	7.92	225.16	NLPH	---	<50.0	1.3	1.30	<0.5	<0.5	<0.5	<0.5
MW3	04/07/03	233.08	11.84	221.24	NLPH	---	<50.0	0.7	0.60	<0.50	<0.5	<0.5	<0.5
MW3	07/11/03 b	233.08	14.38	218.70	NLPH	---	<50.0	0.6	<0.50	<0.50	<0.5	<0.5	<0.5
MW3	10/02/03	233.08	17.3	215.78	NLPH	---	<50.0	1.0	0.90	<0.50	<0.5	<0.5	<0.5
MW3	01/07/04 c	233.08	---	---	---	---	---	---	---	---	---	---	---
MW3	04/06/04	233.08	13.35	219.73	NLPH	---	<50.0	1.1	1.2	0.80	<0.5	1.0	1.7
MW3	08/25/04	233.08	18.54	214.54	NLPH	---	<50.0	---	<0.5	<0.50	<0.5	<0.5	<0.5
MW3	11/15/04	233.08	18.46	214.62	NLPH	---	<50.0	2.6	2.30	<0.50	0.6	0.5	1.9
MW3	02/17/05	233.08	14.08	219.00	NLPH	---	<50.0	---	5.70	<0.50	<0.5	<0.5	0.8
MW3	06/07/05	233.08	12.67	220.41	NLPH	<51	<50.0	---	1.70	<0.50	<0.5	<0.5	<0.5

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 4 of 6)

Well ID	Sampling Date	TOC (feet)	DTW (fbgs)	GW Elev. (feet)	SUBJ	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW3	09/08/05	233.08	16.92	216.16	NLPH	<50.0	<50.0	8.55	6.97	<0.50	<0.50	<0.50	<1.00
MW3	12/08/05	233.08	14.73	218.35	NLPH	<50.0	<50.0	4.86	5.58	<0.50	<0.50	<0.50	<0.50
MW3	03/30/06	233.08	8.95	224.13	NLPH	<47	<50	<2.5	0.790	<0.50	<0.50	<0.50	<0.50
MW4	12/01/94	235.67	17.91	217.76	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	02/22/95	235.67	13.51	222.16	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	04/10/95	235.67	12.85	222.82	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	07/05/95	235.67	19.28	216.39	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	10/17/95	235.67	22.43	213.24	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	01/05/96	235.67	17.47	218.20	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	04/15/96	235.67	15.46	220.21	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	07/16/96	235.67	20.07	215.60	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	10/02/96	235.67	22.54	213.13	NLPH	---	<50	---	---	<0.5	<0.5	<0.5	<0.5
MW4	01/02/97	235.67	10.92	224.75	NLPH	---	<50	4.3	---	<0.5	<0.5	<0.5	<0.5
MW4	04/03/97	235.67	15.78	219.89	NLPH	---	<50	8.6	---	<0.5	<0.5	<0.5	<0.5
MW4	07/03/97	235.67	19.66	216.01	NLPH	---	<50	9.9	---	<0.5	<0.5	<0.5	<0.5
MW4	10/02/97	235.67	21.80	213.87	NLPH	---	<50	7.3	---	<0.5	<0.5	<0.5	0.66
MW4	01/09/98	235.67	15.41	220.26	NLPH	---	<50	9.2	---	<0.5	<0.5	<0.5	<0.5
MW4	04/01/98	235.67	14.08	221.59	NLPH	---	<50	95	110.0	<0.5	<0.5	<0.5	<0.5
MW4	07/02/98	235.67	18.49	217.18	NLPH	---	<50	82	---	<0.5	<0.5	<0.5	<0.5
MW4	10/01/98	235.67	21.88	213.79	NLPH	---	<50	27	---	<0.5	<0.5	<0.5	<0.5
MW4	01/07/99	235.67	20.03	215.64	NLPH	---	<50	62	---	<0.5	<0.5	<0.5	<0.5
MW4	04/07/99	235.67	14.49	221.18	NLPH	---	<50	94.4	---	<0.5	<0.5	<0.5	<0.5
MW4	07/13/99	235.67	20.94	214.73	NLPH	---	<50	40.5	---	<0.5	<0.5	<0.5	<0.5
MW4	10/28/99	235.67	21.13	214.54	NLPH	---	<50	69	---	<1	<1	<1	<1
MW4	02/23/00	235.67	12.08	223.59	NLPH	---	<50	20	14	<0.5	<0.5	<0.5	<0.5
MW4	05/30/00	235.67	12.19	223.48	NLPH	---	<50	52	47	<0.5	<0.5	<0.5	<0.5
MW4	06/16/00	235.67	Property transferred to Valero Refining Company.										
MW4	07/24/00	235.67	20.81	214.86	NLPH	---	<50	200	150	<0.5	<0.5	<0.5	<0.5
MW4	10/06/00	235.67	21.74	213.93	NLPH	---	<50	260	180	<0.5	0.51	<0.5	0.77
MW4	01/05/01	235.67	21.40	214.27	NLPH	---	<50	290	---	<0.5	<0.5	<0.5	<0.5
MW4	04/09/01	235.67	18.40	217.27	NLPH	---	<50	1,500	1,900	<0.5	<0.5	<0.5	<0.5
MW4	07/09/01	235.67	21.38	214.29	NLPH	---	<50	1,900	1,800	<0.5	<0.5	<0.5	<0.5
MW4	10/01/01	235.67	22.39	213.28	NLPH	---	<50	310	380	<0.5	<0.5	<0.5	<0.5
MW4	Nov-2001	235.71	Well surveyed in compliance with AB 2886 requirements.										
MW4	01/03/02	235.71	9.71	226.00	NLPH	---	<50.0	55.1	87.5	<0.50	0.50	<0.50	2.00
MW4	04/11/02	235.71	18.42	217.29	NLPH	---	619	---	1,040	<0.50	<0.50	<0.50	<0.50
MW4	07/05/02	235.71	17.68	218.03	NLPH	---	699	761	722	<5.0	<5.0	<5.0	<5.0
MW4	10/07/02	235.71	21.32	214.39	NLPH	---	461	659	801	<0.5	<0.5	<0.5	<0.5
MW4	01/24/03	235.71	11.78	223.93	NLPH	---	266	345	269	<0.5	<0.5	<0.5	<0.5
MW4	04/07/03	235.71	17.32	218.39	NLPH	---	822	992	1,130	<0.50	<0.5	<0.5	<0.5
MW4	07/11/03 b	235.71	19.41	216.30	NLPH	---	867	838	965	<0.50	<0.5	<0.5	<0.5
MW4	10/02/03	235.71	21.66	214.05	NLPH	---	627	677	830	<0.50	<0.5	<0.5	<0.5
MW4	01/09/04	235.71	13.35	222.36	NLPH	---	175	240	277	<0.50	<0.5	<0.5	<0.5
MW4	04/06/04	235.71	18.90	216.81	NLPH	---	290	386	314	0.50	<0.5	1.9	2.9
MW4	08/25/04	235.71	22.74	212.97	NLPH	---	499	686	508	<0.50	<0.5	<0.5	<0.5
MW4	11/15/04	235.71	21.82	213.89	NLPH	---	281	240	286	<0.50	0.50	<0.5	1.3
MW4	02/17/05	235.71	17.88	217.83	NLPH	---	574	---	640	<0.50	<0.5	<0.5	<0.5

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 5 of 6)

Well ID	Sampling Date	TOC (feet)	DTW (fbgs)	GW Elev. (feet)	SUBJ	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW4	06/07/05	235.71	16.79	218.92	NLPH	<50	69.3	---	121	<0.50	<0.5	<0.5	<0.5
MW4	09/08/05	235.71	20.70	215.01	NLPH	<50.0	112	428	450	<0.50	<0.50	<0.50	<1.00
MW4	12/08/05	235.71	18.62	217.09	NLPH	<50.0	228	195	262	<0.50	<0.50	<0.50	<0.50
MW4	03/30/06	235.71	11.92	223.79	NLPH	<47	<250	200	199	<2.5	<2.5	<2.5	<2.5
MW5	Dec-2002	232.31	Well surveyed in compliance with AB 2886 requirements.										
MW5	01/24/03	232.31	12.24	220.07	NLPH	---	<50.0	17.0	16.6	<0.5	<0.5	<0.5	<0.5
MW5	04/07/03	232.31	14.69	217.62	NLPH	---	<50.0	22.3	23.4	<0.50	<0.5	<0.5	<0.5
MW5	07/11/03 b	232.31	16.18	216.13	NLPH	---	<50.0	8.8	9.10	<0.50	<0.5	<0.5	<0.5
MW5	10/02/03	232.31	18.84	213.47	NLPH	---	<50.0	2.5	2.90	<0.50	<0.5	<0.5	<0.5
MW5	01/09/04	232.31	12.57	219.74	NLPH	---	<50.0	3.70	3.4	<0.50	<0.5	<0.5	<0.5
MW5	04/06/04	232.31	15.51	216.80	NLPH	---	<50.0	7.5	5.1	<0.50	<0.5	<0.5	<0.5
MW5	08/25/04	232.31	18.34	213.97	NLPH	---	<50.0	0.9	0.70	<0.50	<0.5	<0.5	<0.5
MW5	11/15/04	232.31	18.77	213.54	NLPH	---	<50.0	<0.5	---	<0.50	<0.5	<0.5	1.0
MW5	02/17/05	232.31	15.71	216.60	NLPH	---	<50.0	---	<0.50	<0.50	<0.5	<0.5	<0.5
MW5	06/07/05	232.31	14.64	217.67	NLPH	<50	<50.0	---	3.00	<0.50	<0.5	<0.5	<0.5
MW5	09/08/05	232.31	15.52	216.79	NLPH	<50.0	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<1.00
MW5	12/08/05	232.31	14.54	217.77	NLPH	<50.0	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<0.50
MW5	03/30/06	232.31	12.18	220.13	NLPH	<48	<50	35	30.0	<0.50	<0.50	<0.50	<0.50
MW6	10/07/02	---	19.09	---	NLPH	---	<50.0	17.5	17.0	<0.5	<0.5	<0.5	<0.5
MW6	Dec-2002	231.91	Well surveyed in compliance with AB 2886 requirements.										
MW6	01/24/03	231.91	11.42	220.49	NLPH	---	<50.0	1.6	1.50	<0.5	<0.5	<0.5	<0.5
MW6	04/07/03	231.91	15.08	216.83	NLPH	---	<50.0	7.1	7.20	<0.50	<0.5	<0.5	<0.5
MW6	07/11/03 b	231.91	17.70	214.21	NLPH	---	63.7	52.9	57.9	<0.50	<0.5	<0.5	<0.5
MW6	10/02/03	231.91	19.44	212.47	NLPH	---	<50.0	38.1	45.6	<0.50	<0.5	<0.5	<0.5
MW6	01/09/04	231.91	12.05	219.86	NLPH	---	<50.0	3.0	3.00	<0.50	<0.5	<0.5	<0.5
MW6	04/06/04	231.91	15.47	216.44	NLPH	---	<50.0	17.3	14.4	<0.50	<0.5	<0.5	<0.5
MW6	08/25/04	231.91	20.50	211.41	NLPH	---	<50.0	45.6	42.2	<0.50	<0.5	<0.5	<0.5
MW6	11/15/04	231.91	19.45	212.46	NLPH	---	<50.0	15.2	15.0	<0.50	0.5	<0.5	1.2
MW6	02/17/05	231.91	16.02	215.89	NLPH	---	<50.0	---	4.40	<0.50	<0.5	<0.5	<0.5
MW6	06/07/05	231.91	14.96	216.95	NLPH	<51	<50.0	---	2.80	<0.50	<0.5	<0.5	<0.5
MW6	09/08/05	231.91	17.25	214.66	NLPH	<50.0	<50.0	24.5	38.6	<0.50	<0.50	<0.50	<1.00
MW6	12/08/05	231.91	15.82	216.09	NLPH	<50.0	<50.0	11.4	14.3	<0.50	<0.50	<0.50	<0.50
MW6	03/30/06	231.91	12.21	219.70	NLPH	<48	<50	<2.5	<0.500	<0.50	<0.50	<0.50	<0.50
MW7	Dec-2002	234.71	Well surveyed in compliance with AB 2886 requirements.										
MW7	01/24/03	234.71	11.33	223.38	NLPH	---	71.9	79.1	76.5	<0.5	<0.5	<0.5	<0.5
MW7	04/07/03	234.71	16.39	218.32	NLPH	---	<50.0	28.2	29.8	<0.50	<0.5	<0.5	<0.5
MW7	07/11/03 b	234.71	18.55	216.16	NLPH	---	<50.0	15.9	16.6	<0.50	<0.5	<0.5	<0.5
MW7	10/02/03	234.71	20.78	213.93	NLPH	---	<50.0	44.1	50.3	<0.50	<0.5	<0.5	<0.5
MW7	01/09/04	234.71	12.50	222.21	NLPH	---	<50.0	24.5	27.2	<0.50	<0.5	<0.5	<0.5
MW7	04/06/04	234.71	16.40	218.31	NLPH	---	<50.0	5.5	4.2	<0.50	<0.5	<0.5	<0.5
MW7	08/25/04	234.71	21.92	212.79	NLPH	---	<50.0	9.8	7.60	<0.50	<0.5	<0.5	<0.5
MW7	11/15/04	234.71	20.91	213.80	NLPH	---	<50.0	12.3	11.8	1.00	1.8	1.2	4.5
MW7	02/17/05	234.71	16.86	217.85	NLPH	---	<50.0	---	2.20	<0.50	<0.5	<0.5	0.7
MW7	06/07/05	234.71	15.93	218.78	NLPH	<50	<50.0	---	1.80	<0.50	<0.5	<0.5	<0.5
MW7	09/08/05	234.71	19.90	214.81	NLPH	<50.0	<50.0	16.6	16.9	<0.50	<0.50	<0.50	<1.00

TABLE 1A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 6 of 6)

Well ID	Sampling Date	TOC (feet)	DTW (fbgs)	GW Elev. (feet)	SUBJ	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW7	12/08/05	234.71	18.07	216.64	NLPH	<50.0	<50.0	16.2	22.3	<0.50	<0.50	<0.50	<0.50
MW7	03/30/06	234.71	10.91	223.80	NLPH	<47	<50	9.7	7.96	<0.50	<0.50	<0.50	<0.50
MW8	10/07/02	—	22.04	—	NLPH	—	<50.0	0.5	<0.50	<0.5	<0.5	<0.5	<0.5
MW8	Dec-2002	236.28	Well surveyed in compliance with AB 2886 requirements.		NLPH	—	<50.0	<0.5	—	<0.5	<0.5	<0.5	<0.5
MW8	01/24/03	236.28	13.62	222.66	NLPH	—	<50.0	6.1	5.60	<0.50	<0.5	<0.5	<0.5
MW8	04/07/03	236.28	18.32	217.96	NLPH	—	<50.0	4.4	4.80	<0.50	<0.5	<0.5	<0.5
MW8	07/11/03 b	236.28	20.35	215.93	NLPH	—	<50.0	1.4	1.60	<0.50	<0.5	<0.5	<0.5
MW8	10/02/03	236.28	22.64	213.64	NLPH	—	<50.0	0.5	0.60	<0.50	<0.5	<0.5	<0.5
MW8	01/09/04	236.28	14.56	221.72	NLPH	—	<50.0	12.9	10.0	<0.50	<0.5	<0.5	<0.5
MW8	04/06/04	236.28	18.56	217.72	NLPH	—	<50.0	2.2	1.60	<0.50	<0.5	<0.5	<0.5
MW8	08/25/04	236.28	23.00	213.28	NLPH	—	<50.0	0.9	0.90	0.60	1.2	0.8	2.8
MW8	11/15/04	236.28	22.70	213.58	NLPH	—	<50.0	—	5.40	<0.50	<0.5	<0.5	<0.5
MW8	02/17/05	236.28	19.08	217.20	NLPH	—	<50.0	—	8.40	<0.50	<0.5	<0.5	<0.5
MW8	06/07/05	236.28	17.87	218.41	NLPH	<50	<50.0	3.61	0.720	<0.50	<0.50	<0.50	<1.00
MW8	09/08/05	236.28	20.91	215.37	NLPH	<50.0	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<0.50
MW8	12/08/05	236.28	19.59	216.69	NLPH	<50.0	<50.0	3.1	2.63	<0.50	<0.50	<0.50	<0.50
MW8	03/30/06	236.28	13.31	222.97	NLPH	<47	<50						

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B with silica gel cleanup. Analyses added at the request of the California Regional Water Quality Control Board, North Coast Region in second quarter 2005.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015 (modified).
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
MTBE 8021B	=	Methyl tertiary butyl ether analyzed using EPA Method 8020 or 8021B.
MTBE 8260B	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
fbgs	=	Feet below ground surface.
µg/L	=	Micrograms per liter.
<	=	Less than the indicated reporting limit shown by the laboratory.
—	=	Not measured/Not sampled/Not analyzed.
a	=	Elevation of casing altered during construction.
b	=	Groundwater samples received by laboratory out of temperature compliance at 14.4 degrees celsius.
c	=	Well inaccessible.
d	=	Sample containers broken in shipment; no analyses conducted.

Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 4)

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
MW1	12/01/94 - 01/09/98	Not analyzed for these analytes.							
MW1	04/01/98	<2.0	<2.0	<100	---	---	<2.0	<500	---
MW1	07/02/98 - 02/23/00	Not analyzed for these analytes.							
MW1	05/30/00	---	<10	<500	<5	<5	<10	---	---
MW1	06/16/00 - Property transferred to Valero Refining Company.								
MW1	07/24/00 - 04/07/03	Not analyzed for these analytes.							
MW1	07/11/03 b	---	---	---	---	---	---	---	---
MW1	10/02/03	---	---	---	---	---	---	---	---
MW1	01/09/04	<0.50	<0.50	2,360	<0.50	<0.50	<0.50	---	---
MW1	04/06/04	---	---	---	---	---	---	---	---
MW1	08/25/04	---	---	---	---	---	---	---	---
MW1	11/15/04	---	---	---	---	---	---	---	---
MW1	02/17/05	<0.50	1.10	11,200	<0.50	<0.50	<0.50	<50.0	---
MW1	06/07/05	<0.50	< 0.50	1,150	<0.50	<0.50	<0.50	<50.0	---
MW1	09/08/05	<0.500	<0.500	354	<0.500	<0.500	<0.500	<50.0	<10,000
MW1	12/08/05	<0.500	<0.500	575	<0.500	<0.500	<0.500	<50.0	<10,000
MW1	03/30/06	<0.500	<0.500	223	<0.500	<0.500	<0.500	<50.0	<100
MW2	12/01/94 - 01/09/98	Not analyzed for these analytes.							
MW2	04/01/98	<2.0	<2.0	<100	---	---	<2.0	<500	---
MW2	07/02/98 - 02/23/00	Not analyzed for these analytes.							
MW2	05/30/00	---	<10	<500	<5	<5	<10	---	---
MW2	06/16/00 - Property transferred to Valero Refining Company.								
MW2	07/24/00 - 04/07/03	Not analyzed for these analytes.							
MW2	07/11/03 b	---	---	---	---	---	---	---	---
MW2	10/02/03	---	---	---	---	---	---	---	---
MW2	01/09/04	<0.50	<0.50	257	<0.50	<0.50	<0.50	---	---
MW2	04/06/04	---	---	---	---	---	---	---	---
MW2	08/25/04	---	---	---	---	---	---	---	---
MW2	11/15/04	---	---	---	---	---	---	---	---
MW2	02/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW2	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW2	09/08/05	<0.500	<0.500	231	<0.500	1.71	<0.500	<50.0	<10,000
MW2	12/08/05	<0.500	<0.500	32.4	<0.500	<0.500	<0.500	<50.0	<10,000
MW2	03/30/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<100
MW3	12/01/94 - 01/09/98	Not analyzed for these analytes.							
MW3	04/01/98	<2.0	<2.0	<100	---	---	<2.0	<500	---
MW3	07/02/98 - 02/23/00	Not analyzed for these analytes.							
MW3	05/30/00	---	<10	<500	<5	<5	<10	---	---
MW3	06/16/00 - Property transferred to Valero Refining Company.								
MW3	07/24/00 - 04/07/03	Not analyzed for these analytes.							
MW3	07/11/03 b	---	---	---	---	---	---	---	---
MW3	10/02/03	---	---	---	---	---	---	---	---

TABLE 1B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 3 of 4)

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
MW6	04/07/03	---	---	---	---	---	---	---	---
MW6	07/11/03 b	---	---	---	---	---	---	---	---
MW6	10/02/03	---	---	---	---	---	---	---	---
MW6	01/09/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---	---
MW6	04/06/04	---	---	---	---	---	---	---	---
MW6	08/25/04	---	---	---	---	---	---	---	---
MW6	11/15/04	---	---	---	---	---	---	---	---
MW6	02/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW6	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW6	09/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
MW6	12/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
MW6	03/30/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	---
MW7	01/24/03	---	---	---	---	---	---	---	---
MW7	04/07/03	---	---	---	---	---	---	---	---
MW7	07/11/03 b	---	---	---	---	---	---	---	---
MW7	10/2/03	---	---	---	---	---	---	---	---
MW7	01/09/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---	---
MW7	04/06/04	---	---	---	---	---	---	---	---
MW7	08/25/04	---	---	---	---	---	---	---	---
MW7	11/15/04	---	---	---	---	---	---	---	---
MW7	02/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW7	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW7	09/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
MW7	12/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
MW7	03/30/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	---
MW8	10/07/02	---	---	---	---	---	---	---	---
MW8	01/24/03	---	---	---	---	---	---	---	---
MW8	04/07/03	---	---	---	---	---	---	---	---
MW8	07/11/03 b	---	---	---	---	---	---	---	---
MW8	10/02/03	---	---	---	---	---	---	---	---
MW8	01/09/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---	---
MW8	04/06/04	---	---	---	---	---	---	---	---
MW8	08/25/04	---	---	---	---	---	---	---	---
MW8	11/15/04	---	---	---	---	---	---	---	---
MW8	02/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW8	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	---
MW8	09/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
MW8	12/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
MW8	03/30/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	---

Former Exxon Service Station 7-3035

[illegible]

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B with silica gel cleanup. Analyses added at the request of the California Regional Water Quality Control Board, North Coast Region in second quarter 2005.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015 (modified).
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
MTBE 8021B	=	Methyl tertiary butyl ether analyzed using EPA Method 8020 or 8021B.
MTBE 8260B	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
fbgs	=	Feet below ground surface.
µg/L	=	Micrograms per liter.
<	=	Less than the indicated reporting limit shown by the laboratory.
---	=	Not measured/Not sampled/Not analyzed.
a	=	Elevation of casing altered during construction.
b	=	Groundwater samples received by laboratory out of temperature compliance at 14.4 degrees celsius.
c	=	Well inaccessible.
d	=	Sample containers broken in shipment; no analyses conducted.

TABLE 2A
PRIVATE WATER WELL SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 2)

Well ID	Sampling Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
W4100	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4100	06/07/05 a	---	---	---	---	---	---	---
W4100	09/08/05 a	---	---	---	---	---	---	---
W4100	12/08/05	Well reportedly destroyed.						
W4200	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4200	06/07/05	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4200	09/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4200	12/08/05 e	---	---	---	---	---	---	---
W4200	03/30/06	<47	<50	<0.50f	<0.50f	<0.50f	<0.50	<0.50
W4420A	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4420A	06/07/05	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4420A	09/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4420A	12/08/05 e	---	---	---	---	---	---	---
W4420A	03/30/06 g	---	---	---	---	---	---	---
W4420B	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4420B	06/07/05 a	---	---	---	---	---	---	---
W4420B	09/08/05	<52.6	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4420B	12/08/05 e	---	---	---	---	---	---	---
W4420B	03/30/06 g	---	---	---	---	---	---	---
W4343	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4343	06/07/05	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4343	09/08/05	64.6d	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4343	09/30/05	<50.0	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4343	12/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500
W4343	03/30/06	<47	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W4358	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4358	06/07/05	---	---	---	---	---	---	---
W4358	09/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4358	12/08/05 e	---	---	---	---	---	---	---
W4358	03/30/06	<47	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W4372	11/03/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	<0.50
W4372	06/07/05	---	---	---	---	---	---	---
W4372	09/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<1.00	<0.500
W4372	12/08/05 e	---	---	---	---	---	---	---
W4372	03/30/06	<47	<50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 2A
PRIVATE WATER WELL SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 2)

Well ID	Sampling Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
W4389	10/04/04	<50	<50.0	<0.50	<0.50	<0.50	<1.00	1.30
W4389	06/07/05	<50	<50.0	<0.50	<0.50	<0.50	<1.00	1.20
W4389	09/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<1.00	3.88
W4389	12/08/05	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500
W4389	03/30/06	<47	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W4344	07/28/05 b	<50	<50.0	<0.50	<0.50	<0.50	<0.50	<0.50
	Primary CDHS MCL	c	c	c	c	c	c	13
	Secondary CDHS MCL	c	c	c	c	c	c	5

Notes:		
CDHS MCL	=	California Department of Health Services Maximum Contaminant Level.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 524.2.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 524.2.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 524.2.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 524.2.
EDB	=	1,2-dibromoethane analyzed using EPA Method 524.2.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 524.2.
Isopropyl Ether	=	Isopropyl ether analyzed using EPA Method 524.2.
Ethanol	=	Ethanol analyzed using EPA Method 524.2.
Methanol	=	Methanol analyzed using EPA Method 8015B.
<	=	Less than the indicated reporting limit shown by the laboratory.
---	=	Not measured/Not sampled/Not analyzed.
a	=	Well inaccessible.
b	=	One-time sample only per access agreement.
c	=	MCL values not applicable; analyte not detected in private wells.
d	=	The chromatogram was not consistent with diesel fuel.
e	=	Well sampled semi-annually.
f	=	Insufficient preservative to reduce sample pH to less than 2. Sample analyzed within 14 days of sampling, but beyond the 7 days recommended for benzene, toluene, and ethylbenzene.
g	=	Unable to extract water; no utility service.

TABLE 2B
ADDITIONAL PRIVATE WATER WELL SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 2)

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Isopropyl Ether (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
W4100	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4100	06/07/05 a	---	---	---	---	---	---	---	---
W4100	09/08/05 a	---	---	---	---	---	---	---	---
W4100	12/08/05	Well reportedly destroyed.							
W4200	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4200	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<5,000
W4200	09/08/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000
W4200	12/08/05 e	---	---	---	---	---	---	---	---
W4200	03/30/06	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<100	<100
W4420A	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4420A	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<5,000
W4420A	09/08/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000
W4420A	12/08/05 e	---	---	---	---	---	---	---	---
W4420A	03/30/06 g	---	---	---	---	---	---	---	---
W4420B	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4420B	06/07/05 a	---	---	---	---	---	---	---	---
W4420B	09/08/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000
W4420B	12/08/05 e	---	---	---	---	---	---	---	---
W4420B	03/30/06 g	---	---	---	---	---	---	---	---
W4343	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4343	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<5,000
W4343	09/08/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000
W4343	09/30/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000
W4343	12/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
W4343	03/30/06	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<100	<100
W4358	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4358	06/07/05	---	---	---	---	---	---	---	---
W4358	09/08/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000
W4358	12/08/05 e	---	---	---	---	---	---	---	---
W4358	03/30/06	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<100	<100
W4372	11/03/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4372	06/07/05	---	---	---	---	---	---	---	---
W4372	09/08/05	<0.500	<0.500	<5.00	<0.500	<0.500	<0.500	<50.0	<10,000

TABLE 2B
ADDITIONAL PRIVATE WATER WELL SAMPLING DATA
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 2)

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Isopropyl Ether (µg/L)	Ethanol (µg/L)	Methanol (µg/L)
W4372	12/08/05 e	---	---	---	---	---	---	---	---
W4372	03/30/06	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<100	<100
W4389	10/04/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<10,000
W4389	06/07/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<5,000
W4389	09/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
W4389	12/08/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	<50.0	<10,000
W4389	03/30/06	<0.50	<0.50	<20	<0.50	<0.50	<0.50	<100	<100
W4344	07/28/05 b	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	<50.0	<5,000

Notes:		
CDHS MCL	=	California Department of Health Services Maximum Contaminant Level.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 524.2.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 524.2.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 524.2.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 524.2.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 524.2.
EDB	=	1,2-dibromoethane analyzed using EPA Method 524.2.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 524.2.
Isopropyl Ether	=	Isopropyl ether analyzed using EPA Method 524.2.
Ethanol	=	Ethanol analyzed using EPA Method 524.2.
Methanol	=	Methanol analyzed using EPA Method 8015B.
µg/L	=	Micrograms per liter.
<	=	Less than the indicated reporting limit shown by the laboratory.
---	=	Not measured/Not sampled/Not analyzed.
a	=	Well inaccessible.
b	=	One-time sample only per access agreement.
c	=	MCL values not applicable; analyte not detected in private wells.
d	=	The chromatogram was not consistent with diesel fuel.
f	=	Insufficient preservative to reduce sample pH to less than 2. Sample analyzed within 14 days of sampling, but beyond the 7 days recommended for benzene, toluene, and ethylbenzene.
g	=	Unable to extract water; no utility service.

TABLE 3A
CUMULATIVE GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
Former Exxon Service Station 7-3035
4501 Sonoma Hwy
Santa Rosa, California
(Page 1 of 1)

Sample ID	Date Sampled	Depth (fbs)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<u>Geoprobe Borings</u>									
W-24-B5	10/04/95	24	---	<50	---	<0.50a	<0.50a	<0.50a	<0.50a
W-23-B6	10/04/95	23	---	<50	---	<0.50a	<0.50a	<0.50a	<0.50a
73035-1-25W (GP1)	04/19/00	25	---	<50	21a/22	<0.5a	<0.5a	<0.5a	<0.5a
<u>Remediation Wells</u>									
W-12-AS/SVE4	04/19/00	12	---	98	39,000a/32,000	0.58a	<0.5	<0.5a	<0.5a
<u>CPT-HP Borings</u>									
W-42-CPT1 (HP1)	08/18/04	42	---	<100	6,100	<1.00	<1.0	<1.0	<3.0
W-54-CPT1 (HP1)	08/18/04	54	---	197	80.9	<0.50	<0.5	<0.5	1.4
W-25-CPT2 (HP2)	08/20/04	25	---	<50	<0.50	<0.50	<0.5	<0.5	<0.5
W-38-CPT2 (HP2)	08/20/04	38	---	<50	<0.50	<0.50	<0.5	<0.5	<0.5
W-60-CPT2 (HP2)	08/20/04	60	---	<50	<0.50	<0.50	<0.5	<0.5	<0.5
W-25-CPT3 (HP3)	08/19/04	25	---	73.2	<0.50	<0.50	<0.5	<0.5	<0.5
W-35-CPT3 (HP3)	08/19/04	35	---	<50	6.00	<0.50	<0.5	<0.5	<0.5
W-48-CPT3 (HP3)	08/19/04	48	---	<50	19.4	<0.50	<0.5	<0.5	<0.5
W-36-CPT4 (HP4)	09/24/04	36	---	3,240	5,200	<0.50	<0.5	<0.5	<0.5
W-42-CPT4 (HP4)	09/24/04	42	---	3,920	6,450	<0.50	<0.5	<0.5	0.8
W-50-CPT5 (HP5)	08/20/04	50	---	<50.0	3.40	<0.50	<0.5	<0.5	<0.5
W-24-HP8	03/08/06	24	50	<1,000	1,000/270a	<10	<10	<10	<10
W-38-HP8	03/08/06	38	51	420	80/69a	<2.5	<2.5	<2.5	<2.5
W-56-HP8	03/08/06	56	b	<50	17/18a	<0.50	<0.50	<0.50	<0.50

Notes:

W-42-CPT1	=	Water sample-depth in feet below ground surface-boring CPT1.
fbs	=	Feet Below ground surface.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
µg/L	=	Mircograms per liter.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/not applicable.
a	=	Analyzed using EPA Method 8021B.
b	=	Insufficient water to sample.

TABLE 3B
ADDITIONAL CUMULATIVE GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 1)

Sample ID	Sampling Date	Depth (fbgs)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
<u>Geoprobe Borings</u>									
W-24-B5	10/4/1995	24	---	---	---	---	---	---	---
W-23-B6	10/4/1995	23	---	---	---	---	---	---	---
73035-1-25W	04/19/00	25	---	---	---	---	---	---	---
<u>Remediation Wells</u>									
W-12-AS/SVE4	04/19/00	12	---	---	---	---	---	---	---
<u>CPT-HP Borings</u>									
W-42-CPT1 (HP1)	08/18/04	42	<0.50	6.90	90.0	<0.50	<0.50	<0.50	---
W-54-CPT1 (HP1)	08/18/04	54	<0.50	<0.50	40.6	<0.50	<0.50	<0.50	---
W-25-CPT2 (HP2)	08/20/04	25	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-38-CPT2 (HP2)	08/20/04	38	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-60-CPT2 (HP2)	08/20/04	60	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-25-CPT3 (HP3)	08/19/04	25	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-35-CPT3 (HP3)	08/19/04	35	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-48-CPT3 (HP3)	08/19/04	48	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-36-CPT4 (HP4)	09/24/04	36	<0.50	5.00	1,620	<0.50	<0.50	<0.50	---
W-42-CPT4 (HP4)	09/24/04	42	<0.50	5.80	602	<0.50	<0.50	<0.50	---
W-50-CPT5 (HP5)	08/20/04	50	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
W-24-HP8	03/08/06	24	<10	<10	4,400	<10	<10	<10	<2,000
W-38-HP8	03/08/06	38	<2.5	<2.5	930	<2.5	<2.5	<2.5	<500
W-56-HP8	03/08/06	56	<0.50	<0.50	42	<0.50	<0.50	<0.50	<100

Notes:		
W-42-CPT1	=	Water sample-depth in feet below ground surface-boring CPT1.
fbgs	=	Feet Below ground surface.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
µg/L	=	Mircograms per liter.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/not applicable.
a	=	Analyzed using EPA Method 8021B.
b	=	Insufficient water to sample.

TABLE 4A
CUMULATIVE SOIL SAMPLE ANALYTICAL RESULTS
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 3)

Sample ID	Sampling Date	Sample Depth (fbs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	TOG (mg/kg)	HVOCs (mg/kg)	SVOCs (mg/kg)
<u>Excavations</u>												
Gasoline USTs												
S13T1W	11/16/93	13	---	7.7	---	0.076	0.21	0.12	0.59	---	---	---
S13T1E	11/16/93	13	---	5.7	---	0.022	0.013	<0.005	0.0095	---	---	---
S13T2W	11/16/93	13	---	12.0	---	0.15	0.17	0.13	0.63	---	---	---
S13T2E	11/16/93	13	---	25.0	---	0.30	0.83	0.30	1.6	---	---	---
S13T3W	11/16/93	13	---	11.0	---	0.022	0.084	0.073	0.38	---	---	---
S13T3E	11/16/93	13	---	3.8	---	0.13	0.087	0.010	0.058	---	---	---
Used-Oil UST												
SW0A	12/28/93	12	<5.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	<50	ND	---
SW0B	12/28/93	12	<5.0	<1.0	---	<0.005	<0.005	<0.005	<0.005	<50	ND	---
Product Lines												
S4PL1	11/18/93	4	---	<1.0	---	<0.005	<0.005	0.0052	0.031	---	---	---
S4PL2	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S4PL3	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S4PL4	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S4PL5	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S4PL6	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	0.039	---	---	---
S4PL7	11/18/93	4	---	<1.0	---	0.012	0.011	<0.005	0.039	---	---	---
Dispensers												
S4D1	11/18/93	4	---	<1.0	---	0.010	<0.005	0.039	0.092	---	---	---
S4D2	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S4D3	11/18/93	4	---	<1.0	---	<0.005	<0.005	<0.005	0.0052	---	---	---
S4D4	11/18/93	4	---	<1.0	---	0.013	0.019	0.032	0.089	---	---	---
<u>Monitoring Wells</u>												
S-10-B1 (MW1)	11/22/94	10	---	<1	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S-15-B1 (MW1)	11/22/94	15	---	<1	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S-10-B2 (MW2)	11/22/94	10	---	2	---	0.250	0.020	0.058	0.230	---	---	---
S-15-B2 (MW2)	11/22/94	15	---	1	---	0.200	<0.005	0.027	0.049	---	---	---
S-10-B3 (MW3)	11/23/94	10	---	<1	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S-15-B3 (MW3)	11/23/94	15	---	<1	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S-10-B4 (MW4)	11/23/94	10	---	<1	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S-15-B4 (MW4)	11/23/94	15	---	<1	---	<0.005	<0.005	<0.005	<0.005	---	---	---
S-10-MW5	11/08/02	10	---	<5.00	<0.0014	0.001	<0.001	<0.001	<0.001	---	---	---
S-15-MW5	11/08/02	15	---	<5.00	<0.0016	<0.001	<0.001	<0.001	<0.001	---	---	---
S-10-MW6	09/05/02	10	---	<0.50	<0.00039	<0.0050	<0.0050	<0.0050	<0.010	---	---	---
S-15-MW6	09/05/02	15	---	<0.50	<0.00037	<0.0050	<0.0050	<0.0050	<0.010	---	---	---

TABLE 4A
CUMULATIVE SOIL SAMPLE ANALYTICAL RESULTS
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 3)

Sample ID	Sampling Date	Sample Depth (fbs)	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	TOG (mg/kg)	HVOCs (mg/kg)	SVOCs (mg/kg)
S-5-MW7	11/08/02	5	---	<5.00	<0.0008	<0.001	<0.001	<0.001	<0.001	---	---	---
S-10-MW7	11/08/02	10	---	<5.00	<0.0008	<0.001	<0.001	<0.001	<0.001	---	---	---
S-10-MW8	09/06/02	10	---	<0.50	<0.00046	<0.0050	<0.0050	<0.0050	<0.010	---	---	---
S-15-MW8	09/06/02	15	---	<0.50	<0.00030	<0.0050	<0.0050	<0.0050	<0.010	---	---	---
<u>Remediation Wells</u>												
S-10-SW1	08/15/95	10	---	180	---	1.3	3	3.7	18	---	---	---
S-10-SW2	08/15/95	10	---	110	---	1.4	4.4	2.7	15	---	---	---
<u>Dry Well</u>												
S-10.5-HA1	09/11/96	10.5	180	2,500	---	<1.2	28	28	220	---	ND	3.8a, 6.5b
TP-11-W	09/11/96	11	23	9.0	---	0.14	0.36	0.13	0.94	---	---	ND
TP-11-E	09/11/96	11	1.1	3.3	---	0.080	0.12	0.036	0.38	---	---	ND
TP-11-S	09/11/96	11	1.9	21	---	0.27	0.77	0.33	2.0	---	---	ND
TP-11-N	09/11/96	11	3.8	13	---	0.15	0.61	0.25	1.6	---	---	1.8a, 2.1b
TP-14-B	09/11/96	14	260	2,100	---	8.7	100	49	260	---	---	8.5a, 10.0b
<u>Stockpile Samples</u>												
S11-181ABCD	11/18/93	---	---	1.1	---	<0.005	0.0053	<0.005	0.026	---	---	---
S11-182ABCD	11/18/93	---	---	120	---	0.11	0.42	0.72	3.3	---	---	---
S11-183ABCD	11/18/93	---	---	1.9	---	0.0057	0.0098	<0.005	0.026	---	---	---
S11-184ABCD	11/18/93	---	---	<1.0	---	<0.005	<0.005	<0.005	0.034	---	---	---
SP-WO-ABCD	12/28/93	---	280	---	---	---	---	---	---	---	---	0.006e, 0.79f
SP-1-(1-4)	11/23/94	---	---	3	---	<0.005	<0.005	<0.005	0.009	---	---	---
SP-1 (1-4)	08/15/95	---	---	12	---	0.065	0.29	0.14	0.79	---	---	---
SP-1-(1-4)	03/25/96	---	---	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---
SP1(A-D) comp	09/17/96	---	---	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---
SP1-(4,3,2,1)	10/02/96	---	85	350	---	1.2	3.3/3.5c	3.6/2.5c	22/15c	---	---	1.5a, 1.7b
SP-(1-4)	09/06/02	---	<1.0	<0.50	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	---	---	ND
S-SP1-4	11/08/02	---	<9.92	<5.00	---	<0.001	<0.001	<0.001	<0.001	---	---	ND
SP1(E-H) comp	09/17/06	---	---	<1.0	---	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---

TABLE 4A
CUMULATIVE SOIL SAMPLE ANALYTICAL RESULTS
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 3 of 3)

Notes:

TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015 (modified).
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021.
Lead	=	Total lead analyzed using EPA Method 6010B.
Cadmium	=	Total lead analyzed using EPA Method 6010B.
Chromium	=	Total lead analyzed using EPA Method 6010B.
Nickel	=	Total lead analyzed using EPA Method 6010B.
Zinc	=	Total lead analyzed using EPA Method 6010B.
TOG	=	Total oil and grease analyzed using EPA Method 5520.
HVOCs	=	Halogenated volatile organic compounds using EPA Method 8010.
SVOCs	=	Select volatile organic compounds analyzed using EPA Method 8270.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed or sampled.
ND	=	No analytes detected at concentrations at or above laboratory detection limits. See laboratory report.
fbgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
a	=	2-methylnaphthalene
b	=	Naphthalene
c	=	Analyzed using EPA Method 8240.
d	=	Soluble threshold leaching concentration.
e	=	Tetrachloroethane.
f	=	Di-n-butylphthalate.

TABLE 4B
ADDITIONAL CUMULATIVE SOIL SAMPLE ANALYTICAL RESULTS
METALS
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 2)

Sample ID	Sampling Date	Depth (fbs)	Lead (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Selenium (mg/kg)	Molybdenum (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)
Excavations																			
Gasoline USTs																			
S13T1W	11/16/93	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S13T1E	11/16/93	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S13T2W	11/16/93	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S13T2E	11/16/93	13	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S13T3W	11/16/93	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S13T3E	11/16/93	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Used-Oil UST																			
SW0A	12/28/93	12	---	---	---	---	---	<0.050	0.11	---	1.8	---	0.76	---	---	---	---	---	---
SW0B	12/28/93	12	---	---	---	---	---	<0.050	<0.10	---	1.9	---	0.59	---	---	---	---	---	---
Product Lines																			
S4PL1	11/18/93	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S4PL2	11/18/93	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S4PL3	11/18/93	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S4PL4	11/18/93	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S4PL5	11/18/93	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S4PL6	11/18/93	4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S4PL7	11/18/93	4	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dispensers																			
Not sampled for these analytes.																			
Monitoring Wells																			
Not sampled for these analytes.																			
Remediation Wells																			
Dry Well																			
S-10.5-HA1	09/11/96	10.5	---	---	---	---	---	<0.50	69	---	110	---	170	---	---	---	---	---	---

Tank Pit
Not sampled for these analytes.

TABLE 4B
ADDITIONAL CUMULATIVE SOIL SAMPLE ANALYTICAL RESULTS
METALS

Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 2)

Sample ID	Sampling Date	Depth (fbgs)	Lead (mg/kg)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Selenium (mg/kg)	Molybdenum (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)
Stockpile Samples																			
S11-181ABCD	11/18/93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S11-182ABCD	11/18/93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S11-183ABCD	11/18/93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S11-184ABCD	11/18/93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SP-WO-ABCD	12/28/93	---	<1.0	<0.60	<0.005	3.2	<0.070	<0.0050	0.17	<0.002	1.0	0.33	1.1	0.47	0.29	<0.005	<0.20	<0.10	<2.0
SP-1-(1-4)	11/23/94	---	<0.50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SP-1-(1-4)	03/25/96	---	0.18d	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SP1(A-D) comp	09/17/96	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SP1(4,3,2,1)	10/02/96	---	43/0.71d	13	11	200	0.84	ND	81/0.37d	0.086	120	57	110	22	88	---	---	---	---
SP-(1-4)	09/06/02	---	<10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S-SP1-4	11/08/02	---	20.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SP1(E-H) comp	09/17/06	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015 (modified).
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021.
Lead	=	Total lead analyzed using EPA Method 6010B.
Cadmium	=	Total lead analyzed using EPA Method 6010B.
Chromium	=	Total lead analyzed using EPA Method 6010B.
Nickel	=	Total lead analyzed using EPA Method 6010B.
Zinc	=	Total lead analyzed using EPA Method 6010B.
Select VOCs	=	Volatile organic compounds analyzed using EPA Method 8010.
TOG	=	Total oil and grease analyzed using EPA Method 5520.
HVOCs	=	Halogenated volatile organic compounds using EPA Method 8010.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed or sampled.
ND	=	No analytes detected at concentrations at or above laboratory detection limits. See laboratory report.
fbgs	=	Feet below ground surface.
mg/kg	=	Milligrams per kilogram.
a	=	2-methylnaphthalene
b	=	Naphthalene
c	=	Analyzed using EPA Method 8240.
d	=	Soluble threshold leaching concentration.
e	=	Tetrachloroethane.
f	=	Di-n-butylphthalate.

TABLE 5
WELL CONSTRUCTION DETAILS
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 1)

Well ID	Date Well Installed	TOC Elev. (feet)	Borehole Diameter (inches)	Total Depth of Boring (fbgs)	Well Depth (fbgs)	Well Casing Diameter (inches)	Well Casing Material	Screened Interval (fbgs)	Slot Size (inches)	Filter Pack Interval (fbgs)	Filter Pack Material
MW1	11/22/94	236.72	8	31	29	NS	NS	15-29	NS	14-31	NS
MW2	11/22/94	235.77	8	29	28	NS	NS	12-28	NS	11-29	NS
MW3	11/23/94	233.08	8	27	27	NS	NS	12-27	NS	10-27	NS
MW4	11/23/94	235.71	8	30	30	NS	NS	15-30	NS	13-30	NS
MW5	11/08/02	232.31	8	30	30	2	PVC	10-30	0.020	11-30	#3 Sand
MW6	09/05/02	231.91	8	30	30	2	PVC	10-30	0.020	9-30	#3 Sand
MW7	11/08/02	234.71	8	29.7	29.7	2	PVC	9-29.7	0.020	8-29.7	#3 Sand
MW8	09/06/02	236.28	8	29.5	29.5	2	PVC	9-29.5	0.020	8-29.5	#3 Sand
AS/SVE1	08/15/95	NS	11	25	25	1	PVC	21.5-25	NS	21-25	NS
					13	2	PVC	8-13	NS	6-18	NS
AS/SVE2	08/15/95	NS	11	25	25	1	PVC	22.5-25	NS	21-25	NS
					13	2	PVC	8-13	NS	6-18	NS
AS/SVE3	03/26/96	NS	10	25	25	NS	NS	21-25	NS	21-25	NS
					15	NS	NS	6-15	NS	5-18	NS
AS/SVE4	03/26/96	NS	10	25	25	NS	NS	21-25	NS	21-25	NS
					15	NS	NS	6-15	NS	5-18	NS
AS/SVE5	03/26/96	NS	10	25	25	NS	NS	21-25	NS	21-25	NS
					15	NS	NS	6-15	NS	5-18	NS
AS/SVE6	03/26/96	NS	10	25	25	NS	NS	21-25	NS	21-25	NS
					15	NS	NS	6-15	NS	5-18	NS
AS/SVE7	03/26/96	NS	10	25	25	NS	NS	21-25	NS	21-25	NS
					15	NS	NS	6-15	NS	5-18	NS

Notes:
TOC Elev. = Top of well casing elevation; datum is mean sea level.
fbgs = Feet below ground surface.
NS = Not specified.

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed Per Period (lbs)	TPHg Removed Cumulative (lbs)	MTBE Removed Per Period (lbs)	MTBE Removed Cumulative (lbs)	Benzene Removed Per Period (lbs)	Benzene Removed Cumulative (lbs)
08/21/03	System running on arrival, down on departure for VPC c/o																	
	52,833	0.65	13,125	60,737	W-INF	510	57	< 0.50	< 0.50	< 0.50	< 0.50	< 63	0.154	< 0.288	< 0.145	< 0.366	< 0.0069	< 0.0117
					W-INT 1	< 50	< 51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	< 51	20	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
09/11/03	System VPC c/o complete, restart system																	
09/11/03	53,000	0.01	167	60,904	W-INF	< 500	60	< 5.0	< 5.0	< 5.0	< 5.0	330	0.001	< 0.289	0.0003	< 0.366	< 0.0000	< 0.0117
					W-INT 1	54	< 50	< 0.50	< 0.50	< 0.50	0.55	< 2.5						
					W-INT 2	< 50	< 51	< 0.50	< 0.50	< 0.50	0.65	< 2.5						
					W-EFF	< 50	< 51	< 0.50	< 0.50	< 0.50	0.63	< 2.5						
02/26/04	53,312	0.001	312	61,216	W-INF	180	100	< 5.0	< 5.0	< 5.0	< 5.0	130	0.001	< 0.290	0.001	< 0.367	< 0.00001	< 0.0118
					W-INT 1	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
03/01/04	63,957	1.85	10,645	71,861	W-INF													
03/08/04	78,884	1.48	14,927	86,788	W-INF	730	< 48	< 2.5	< 2.5	< 2.5	< 2.5	1,100	0.097	< 0.387	0.131	< 0.498	< 0.0008	< 0.0126
					W-INT 1	89	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
03/15/04	91,920	1.29	13,036	99,824														
03/29/04	114,062	1.10	22,142	121,966														
04/05/04	124,304	1.02	10,242	132,208	W-INF	320	< 48	< 2.5	< 2.5	< 2.5	< 2.5	3,600	0.199	< 0.586	0.891	< 1.389	< 0.0009	< 0.0135
					W-INT 1	67	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	71	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
04/13/04	134,298	0.87	9,994	142,202														
04/20/04	143,320	0.90	9,022	151,224														
04/27/04	149,948	0.66	6,628	157,852														
05/04/04	156,716	0.67	6,768	164,620	W-INF	320	< 50	< 1.0	< 1.0	< 1.0	< 1.0	790 b	0.087	< 0.673	0.594	< 1.982	< 0.0005	< 0.0140
					W-INF (Dup)	---	---	---	---	---	---	330 c						
					W-INT 1	95	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	94	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	73	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
05/14/04	156,790	0.01	74	164,694														
05/18/04	156,835	0.01	45	164,739														
05/25/04	157,021	0.02	186	164,925														
06/23/04	157,140	0.00	119	165,044	W-INF	< 100	64	< 1.0	< 1.0	< 1.0	< 1.0	87	0.001	< 0.673	0.002	< 1.984	< 0.000004	< 0.0140
					W-INT 1	< 50	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	55	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 47	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
06/29/04	157,140	0.00	0	165,044														
07/07/04	160,703	0.31	3,563	168,607														
07/14/04	160,751	0.005	48	168,655														
07/21/04	166,260	0.547	5,509	174,164														
07/27/04	170,565	0.498	4,305	178,469	W-INF	350	---	< 2.5	< 2.5	< 2.5	< 2.5	330	0.025	< 0.698	0.023	< 2.007	< 0.000196	< 0.0142
					W-INT 1	< 50	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 3 of 5)

[illegible]

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 4 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed		MTBE Removed		Benzene Removed	
													Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)
02/10/05	262,900	0.146	1,476	280,255	W-INF	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	45.5	< 0.004	< 0.823	0.004	< 2.084	< 0.000043	< 0.0159
					W-INT 1	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
02/17/05	263,000	0.010	100	280,355														
02/24/05	263,726	0.072	726	281,081														
03/03/05	264,684	0.095	958	282,039	W-INF	< 50.0	57	< 0.50	< 0.5	< 0.5	< 0.5	0.60	< 0.001	< 0.824	0.0003	< 2.085	< 0.000007	< 0.0159
					W-INT 1	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
03/10/05	267,456	0.275	2,772	284,811														
03/17/05	273,996	0.649	6,540	291,351														
03/24/05	277,994	0.397	3,998	295,349														
03/31/05	282,900	0.487	4,906	300,255														
04/07/05	287,580	0.464	4,680	304,935	W-INF	138	< 51	< 0.50	< 0.5	< 0.5	< 0.5	178	< 0.018	< 0.842	0.0171	< 2.102	< 0.000096	< 0.0160
					W-INT 1	< 50.0	< 56	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 53	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 56	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
04/14/05	291,388	0.378	3,808	308,743														
04/21/05	294,402	0.299	3,014	311,757														
04/28/05	301,505	0.705	7,103	318,860														
05/05/05	306,200	0.466	4,695	323,555	W-INF	< 50.0	< 51	< 0.50	< 0.5	< 0.5	< 0.5	63.8	< 0.015	< 0.856	0.0188	< 2.121	< 0.000078	< 0.0161
					W-INT 1	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 51	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 51	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
05/12/05	312,580	0.633	6,380	329,935														
05/19/05	319,238	0.661	6,658	336,593														
05/26/05	322,261	0.300	3,023	339,616														
06/02/05	326,499	0.420	4,238	343,854														
06/09/05	329,910	0.338	3,411	347,265														
06/16/05	331,910	0.198	2,000	349,265	W-INF	< 50.0	72d	< 0.50	< 0.5	< 0.5	< 0.5	2.00	< 0.011	< 0.867	0.0071	< 2.128	< 0.000107	< 0.0162
					W-INT 1	< 50.0	74d	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	55d	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	99d	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
06/23/05	334,409	0.248	2,499	351,764														
06/30/05	341,259	0.680	6,850	358,614														
07/07/05	343,871	0.259	2,612	361,226	W-INF	96.0	< 50	< 0.50	0.5	< 0.5	< 0.5	122	< 0.007	< 0.874	0.0062	< 2.134	< 0.000050	< 0.0163
					W-INT 1	< 50.0	72d	< 0.50	0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50	55d	< 0.50	0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50	99d	< 0.50	0.5	< 0.5	< 0.5	< 0.50						
07/14/05	345,881	0.199	2,010	363,236														
07/21/05	348,558	0.266	2,677	365,913														
07/28/05	352,125	0.354	3,567	369,480														
08/04/05	355,510	0.336	3,385	372,865	W-INF	145	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	150	0.012	< 0.886	0.0132	< 2.147	< 0.000049	< 0.0163
					W-INT 1	< 50.0	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
					W-INT 2	< 50.0	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
					W-EFF	< 50.0	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 5 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed		MTBE Removed		Benzene Removed	
													Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)
08/11/05	358,540	0.301	3,030	375,895														
08/18/05	360,230	0.168	1,690	377,585														
08/25/05	361,950	0.171	1,720	379,305														
08/25/05	System down for rotary vane blower repairs.																	
09/01/05	System down for rotary vane blower repairs.																	
09/01/05	361,987	0.004	37	379,342														

Notes:

- W-INF = Water influent.
- W-INT = Water intermediate.
- W-EFF = Water effluent.
- < = Less than the stated laboratory reporting limit.
- TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
- MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8260.
- NM = Not measured.
- n/a = Not applicable.
- NC = Not Calculated
- = Not analyzed.
- a = If value is below laboratory reporting limit, then reporting limit value is used for removal calculations.
- b = Lab report indicates this is an estimated value above the calibrations range of the instrument.
- c = Sample analyzed beyond EPA recommended hold time.
- d = Chromatogram not consistent with diesel fuel.

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 1 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed Per Period (lbs)	TPHg Removed Cumulative (lbs)	MTBE Removed Per Period (lbs)	MTBE Removed Cumulative (lbs)	Benzene Removed Per Period (lbs)	Benzene Removed Cumulative (lbs)
01/28/03	Started System. System running on departure.					NM	NM	NM	NM	NM	NM	NM						
01/28/03	70																	
01/29/03	System down on arrival and running on departure.																	
01/29/03	1,190	0.78	1,120	1,120	W-INF	< 2,000	390	< 20	< 20	< 20	< 20	2,500	< 0.019	< 0.019	0.023	0.023	< 0.0002	< 0.0002
					W-INT 1	< 50	170	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	70	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
01/30/03	System running on arrival and departure.																	
01/30/03	2,690	1.04	1,500	2,620	W-INF	1,400	510	< 10	< 10	12	19	2,400	0.021	< 0.040	0.031	0.054	< 0.0002	< 0.0004
					W-INT 1	< 50	95	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	71	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
01/31/03	System running on arrival and down on departure for carbon c/o.																	
01/31/03	5,110	1.68	2,420	5,040	W-INF	1,100	170	< 5.0	< 5.0	< 5.0	< 5.0	2,700	0.025	< 0.065	0.051	0.106	< 0.0002	< 0.0005
					W-INT 1	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
02/19/03	System running on arrival and departure.																	
02/19/03	5,630	0.00	520	5,560	W-INF	800	190	< 10	< 10	< 10	< 10	1,800	0.004	< 0.069	0.010	0.115	< 0.0000	< 0.0006
					W-INT 1	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	150	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
02/20/03	System running on arrival and down on departure.																	
02/20/03	7,974	1.63	2,344	7,904	W-INF	---	---	---	---	---	---	---	NC	NC	NC	NC	NC	NC
					W-INT 1	---	---	---	---	---	---	---						
					W-INT 2	---	---	---	---	---	---	---						
					W-EFF	---	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
06/19/03	310	0.00	310	8,214	W-INF	< 50	100	< 0.50	< 0.50	< 0.50	0.69	32	< 0.009	< 0.079	0.020	0.136	< 0.0001	< 0.0007
					W-INT 1	< 50	100	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	120	< 0.50	< 0.50	< 0.50	1.5	< 0.50						
					W-EFF	< 50	77	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
06/26/03	8,196	0.78	7,886	16,100														
07/02/03	System running on arrival, down on departure for VPC c/o																	
	16,916	1.01	8,720	24,820														
07/17/03	System VPC c/o complete, restart system																	
	16,996	0.00	80	24,900														
07/24/03	20,102	0.31	3,106	28,006	W-INF	620	53	< 50	< 50	< 50	< 50	1,000	0.055	< 0.134	0.085	0.221	< 0.0042	< 0.0048
					W-INT 1	< 50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	57	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
07/31/03	29,810	0.96	9,708	37,714														
08/07/03	39,708	0.98	9,898	47,612														

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed Per Period (lbs)	TPHg Removed Cumulative (lbs)	MTBE Removed Per Period (lbs)	MTBE Removed Cumulative (lbs)	Benzene Removed Per Period (lbs)	Benzene Removed Cumulative (lbs)
08/21/03	System running on arrival, down on departure for VPC c/o																	
	52,833	0.65	13,125	60,737	W-INF	510	57	< 0.50	< 0.50	< 0.50	< 0.50	< 63	0.154	< 0.288	< 0.145	< 0.366	< 0.0069	< 0.0117
					W-INT 1	< 50	< 51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	< 51	20	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
09/11/03	System VPC c/o complete, restart system																	
09/11/03	53,000	0.01	167	60,904	W-INF	< 500	60	< 5.0	< 5.0	< 5.0	< 5.0	330	0.001	< 0.289	0.0003	< 0.366	< 0.0000	< 0.0117
					W-INT 1	54	< 50	< 0.50	< 0.50	< 0.50	0.55	< 2.5						
					W-INT 2	< 50	< 51	< 0.50	< 0.50	< 0.50	0.65	< 2.5						
					W-EFF	< 50	< 51	< 0.50	< 0.50	< 0.50	0.63	< 2.5						
02/26/04	53,312	0.001	312	61,216	W-INF	180	100	< 5.0	< 5.0	< 5.0	< 5.0	130	0.001	< 0.290	0.001	< 0.367	< 0.00001	< 0.0118
					W-INT 1	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
03/01/04	63,957	1.85	10,645	71,861	W-INF													
03/08/04	78,884	1.48	14,927	86,788	W-INF	730	< 48	< 2.5	< 2.5	< 2.5	< 2.5	1,100	0.097	< 0.387	0.131	< 0.498	< 0.0008	< 0.0126
					W-INT 1	89	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
03/15/04	91,920	1.29	13,036	99,824														
03/29/04	114,062	1.10	22,142	121,966														
04/05/04	124,304	1.02	10,242	132,208	W-INF	320	< 48	< 2.5	< 2.5	< 2.5	< 2.5	3,600	0.199	< 0.586	0.891	< 1.389	< 0.0009	< 0.0135
					W-INT 1	67	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	71	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
04/13/04	134,298	0.87	9,994	142,202														
04/20/04	143,320	0.90	9,022	151,224														
04/27/04	149,948	0.66	6,628	157,852														
05/04/04	156,716	0.67	6,768	164,620	W-INF	320	< 50	< 1.0	< 1.0	< 1.0	< 1.0	790 b	0.087	< 0.673	0.594	< 1.982	< 0.0005	< 0.0140
					W-INF (Dup)	---	---	---	---	---	---	330 c						
					W-INT 1	95	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	94	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	73	< 48	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
05/14/04	156,790	0.01	74	164,694														
05/18/04	156,835	0.01	45	164,739														
05/25/04	157,021	0.02	186	164,925														
06/23/04	157,140	0.00	119	165,044	W-INF	< 100	64	< 1.0	< 1.0	< 1.0	< 1.0	87	0.001	< 0.673	0.002	< 1.984	< 0.000004	< 0.0140
					W-INT 1	< 50	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	55	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	< 47	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
06/29/04	157,140	0.00	0	165,044														
07/07/04	160,703	0.31	3,563	168,607														
07/14/04	160,751	0.005	48	168,655														
07/21/04	166,260	0.547	5,509	174,164														
07/27/04	170,565	0.498	4,305	178,469	W-INF	350	---	< 2.5	< 2.5	< 2.5	< 2.5	330	0.025	< 0.698	0.023	< 2.007	< 0.000196	< 0.0142
					W-INT 1	< 50	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-INT 2	< 50	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						
					W-EFF	< 50	---	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50						

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 4 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed		MTBE Removed		Benzene Removed	
													Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)
02/10/05	262,900	0.146	1,476	280,255	W-INF	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	45.5	< 0.004	< 0.823	0.004	< 2.084	< 0.000043	< 0.0159
					W-INT 1	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
02/17/05	263,000	0.010	100	280,355														
02/24/05	263,726	0.072	726	281,081														
03/03/05	264,684	0.095	958	282,039	W-INF	< 50.0	57	< 0.50	< 0.5	< 0.5	< 0.5	0.60	< 0.001	< 0.824	0.0003	< 2.085	< 0.000007	< 0.0159
					W-INT 1	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
03/10/05	267,456	0.275	2,772	284,811														
03/17/05	273,996	0.649	6,540	291,351														
03/24/05	277,994	0.397	3,998	295,349														
03/31/05	282,900	0.487	4,906	300,255														
04/07/05	287,580	0.464	4,680	304,935	W-INF	138	< 51	< 0.50	< 0.5	< 0.5	< 0.5	178	< 0.018	< 0.842	0.0171	< 2.102	< 0.000096	< 0.0160
					W-INT 1	< 50.0	< 56	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 53	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 56	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
04/14/05	291,388	0.378	3,808	308,743														
04/21/05	294,402	0.299	3,014	311,757														
04/28/05	301,505	0.705	7,103	318,860														
05/05/05	306,200	0.466	4,695	323,555	W-INF	< 50.0	< 51	< 0.50	< 0.5	< 0.5	< 0.5	63.8	< 0.015	< 0.856	0.0188	< 2.121	< 0.000078	< 0.0161
					W-INT 1	< 50.0	< 50	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	< 51	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	< 51	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
05/12/05	312,580	0.633	6,380	329,935														
05/19/05	319,238	0.661	6,658	336,593														
05/26/05	322,261	0.300	3,023	339,616														
06/02/05	326,499	0.420	4,238	343,854														
06/09/05	329,910	0.338	3,411	347,265														
06/16/05	331,910	0.198	2,000	349,265	W-INF	< 50.0	72d	< 0.50	< 0.5	< 0.5	< 0.5	2.00	< 0.011	< 0.867	0.0071	< 2.128	< 0.000107	< 0.0162
					W-INT 1	< 50.0	74d	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50.0	55d	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50.0	99d	< 0.50	< 0.5	< 0.5	< 0.5	< 0.50						
06/23/05	334,409	0.248	2,499	351,764														
06/30/05	341,259	0.680	6,850	358,614														
07/07/05	343,871	0.259	2,612	361,226	W-INF	96.0	< 50	< 0.50	0.5	< 0.5	< 0.5	122	< 0.007	< 0.874	0.0062	< 2.134	< 0.000050	< 0.0163
					W-INT 1	< 50.0	72d	< 0.50	0.5	< 0.5	< 0.5	< 0.50						
					W-INT 2	< 50	55d	< 0.50	0.5	< 0.5	< 0.5	< 0.50						
					W-EFF	< 50	99d	< 0.50	0.5	< 0.5	< 0.5	< 0.50						
07/14/05	345,881	0.199	2,010	363,236														
07/21/05	348,558	0.266	2,677	365,913														
07/28/05	352,125	0.354	3,567	369,480														
08/04/05	355,510	0.336	3,385	372,865	W-INF	145	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	150	0.012	< 0.886	0.0132	< 2.147	< 0.000049	< 0.0163
					W-INT 1	< 50.0	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
					W-INT 2	< 50.0	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						
					W-EFF	< 50.0	< 50.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500						

TABLE 6
OPERATIONAL AND PERFORMANCE DATA FOR DUAL-PHASE EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 5 of 5)

Date	Totalizer Reading (gal)	Average Flowrate (gpm)	Gallons Discharged	Total Discharged	Sample I.D.	TPHg (µg/L)	TPHd (µg/L)	Ba (µg/L)	Ta (µg/L)	Ea (µg/L)	Xa (µg/L)	MTBEa (µg/L)	TPHg Removed		MTBE Removed		Benzene Removed	
													Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)	Per Period (lbs)	Cumulative (lbs)
08/11/05	358,540	0.301	3,030	375,895														
08/18/05	360,230	0.168	1,690	377,585														
08/25/05	361,950	0.171	1,720	379,305														
08/25/05	System down for rotary vane blower repairs.																	
09/01/05	System down for rotary vane blower repairs.																	
09/01/05	361,987	0.004	37	379,342														

Notes:

- W-INF = Water influent.
- W-INT = Water intermediate.
- W-EFF = Water effluent.
- < = Less than the stated laboratory reporting limit.
- TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
- MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8260.
- NM = Not measured.
- n/a = Not applicable.
- NC = Not Calculated
- = Not analyzed.
- a = If value is below laboratory reporting limit, then reporting limit value is used for removal calculations.
- b = Lab report indicates this is an estimated value above the calibrations range of the instrument.
- c = Sample analyzed beyond EPA recommended hold time.
- d = Chromatogram not consistent with diesel fuel.

TABLE 7
OPERATIONAL AND PERFORMANCE DATA FOR SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 2 of 8)

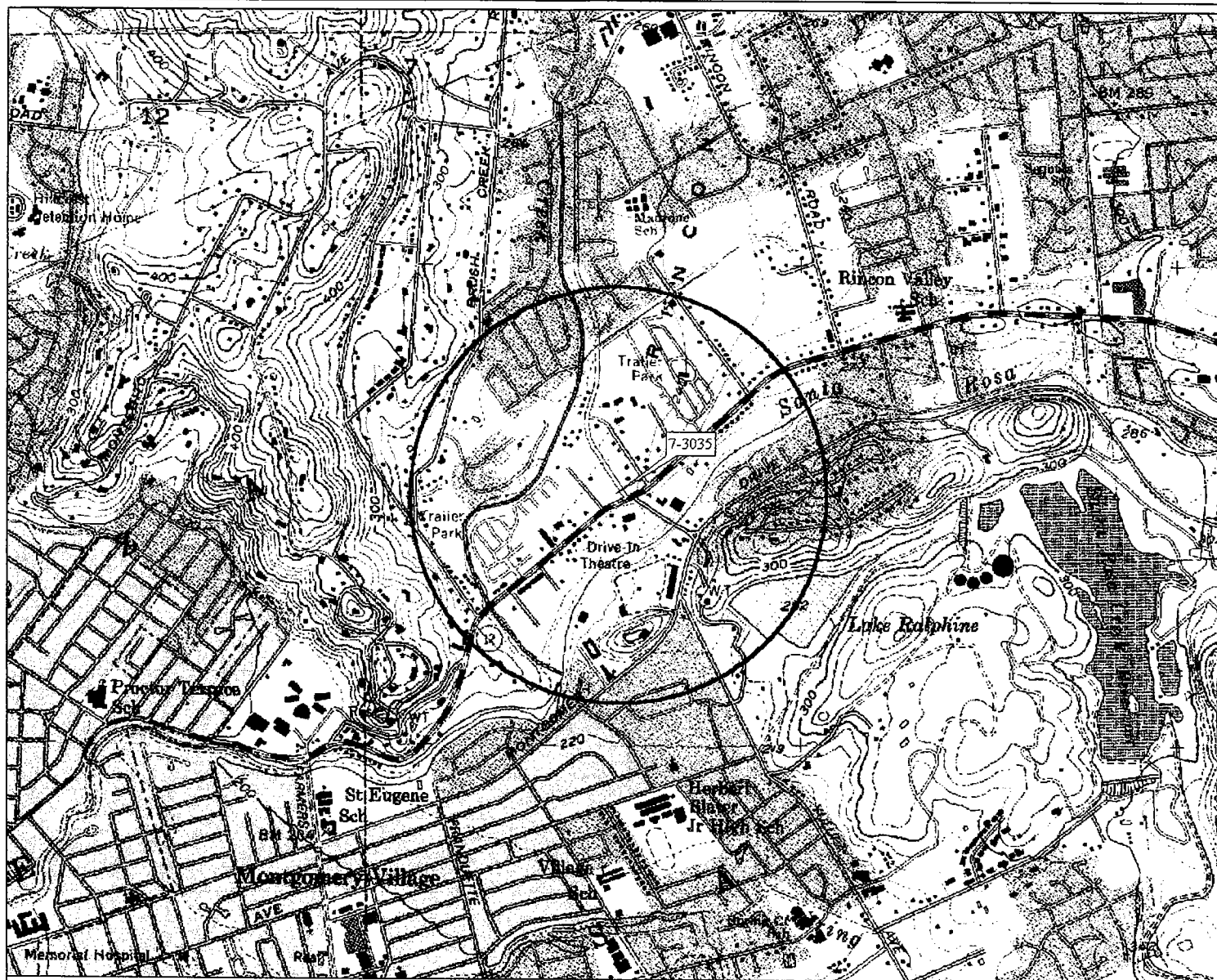
Date	FIELD MEASUREMENTS								Sample I.D.	PID ppmv	LABORATORY ANALYTICAL RESULTS			TPHg Removal		MTBE Removal		Benzene Removal	
	Hour Meter	Temp deg F	Vacuum in. Hg	Pressure in. H2O	Flow to fpm	Carbon cfm	scfm	TPHg (mg/M³)			Benzene (mg/M³)	MTBE (mg/M³)	Period (lbs)	Cumulative (lbs)	Period (lbs)	Cumulative (lbs)	Period (lbs)	Cumulative (lbs)	
06/26/03	199	158	18	2	2,800	58.8	50.7	A-INF	NM										
								A-INT1	NM										
								A-INT2	NM										
								A-EFF	NM										
07/02/03	System running on arrival, down on departure for VPC c/o																		
07/02/03	366	150	16	2	3,300	69.3	60.5	A-INF	162.0										
								A-INT1	39.9										
								A-INT2	49.8										
								A-EFF	5.7										
07/17/03	System VPC c/o complete, restart system																		
07/17/03	368	138	24	2	3,000	63	56.1	A-INF	266.0										
								A-INT1	18.0										
								A-INT2	0.0										
								A-EFF	0.0										
07/24/03	532	145	18	2	3,100	65.1	57.3	A-INF	461.2	190	1.4	24	21.538	< 366.78	1.878	< 1.880	0.188	< 17.34	
								A-INT1	41.3	< 10	< 0.10	< 0.50							
								A-INT2	2.4	< 10	< 0.10	< 0.50							
								A-EFF	0.0	< 10	< 0.10	< 0.50							
07/31/03	690	150	24	2	3,100	65.1	56.8	A-INF	388.0										
								A-INT1	17.9										
								A-INT2	0.8										
								A-EFF	0.0										
08/07/03	887	130	17.5	NR	3,250	68.25	61.3	A-INF	416.0										
								A-INT1	16.3										
								A-INT2	1.6										
								A-EFF	0.0										
08/21/03	System running on arrival, down on departure for VPC c/o																		
	1,214	150	17.5	2	3,400	71.4	62.3	A-INF	387.0	630	2.8	20	62.566	< 429.35	3.357	< 5.237	0.320	< 17.66	
								A-INT1	456.0	820	7.5	48							
								A-INT2	335.0	470	12	39							
								A-EFF	217.0	460	3.3	52							
09/11/03	VPC c/o completed, system restarted, down on departure for VPC c/o																		
	1,216	155	18.5	2	3,000	63	54.6	A-INF	1,928.0										
								A-INT1	39.7										
								A-INT2	19.9										
								A-EFF	7.2										
02/26/04	System undergone retrofit, VPC vessels now contain a total of 4,000 lbs																		
	1,222	122	22	2	1,000	21	19.2	A-INF	25.0	14	< 0.10	4.8	0.393	< 429.74	0.015	< 5.252	< 0.002	< 17.66	
								A-INT	0.0	< 10	< 0.10	< 0.50							
								A-EFF	0.0	< 10	< 0.10	< 0.50							

TABLE 7
OPERATIONAL AND PERFORMANCE DATA FOR SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3035
4501 Sonoma Highway
Santa Rosa, California
(Page 8 of 8)

Date	FIELD MEASUREMENTS									LABORATORY ANALYTICAL RESULTS			TPHg Removal		MTBE Removal		Benzene Removal	
	Hour Meter	Temp deg F	Vacuum in. Hg	Pressure in. H2O	Flow to Carbon			Sample I.D.	PID ppmv	TPHg (mg/M³)	Benzene (mg/M³)	MTBE (mg/M³)	Period (lbs)	Cumulative (lbs)	Period (lbs)	Cumulative (lbs)	Period (lbs)	Cumulative (lbs)
08/11/05	10,994	140	12	2	3,800	79.8	70.8	A-INF	0.0									
								A-INT	0.0									
								A-EFF	0.0									
08/18/05	11,082	14	12	2	3,800	79.8	89.7	A-INF	0.0									
								A-INT	0.0									
								A-EFF	0.0									
08/25/05	11,246	nm	nm	nm	nm	nm	nm	A-INF	nm									
								A-INT	nm									
								A-EFF	nm									
08/25/05	System down for rotary vane blower repairs.																	
09/01/05	Restarted temporarily to troubleshoot rotary vane blowers.																	
09/01/05	11,247	nm	nm	nm	nm	nm	nm	A-INF	nm									
								A-INT	nm									
								A-EFF	nm									

Notes:

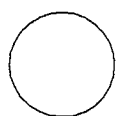
A-INF = Air influent.
A-EFF = Air effluent.
A-INT = Air intermediate.
acfm = Actual cubic feet per minute.
scfm = Standard cubic feet per minute.
ppmv = Parts per million by volume.
NM = Not measured.
NA = Not applicable.
in. Hg = Inches mercury.
in. H₂O = Inches water.



3-D TopoQuads Copyright © 1999 DeLorme, Yarmouth, ME 04096 Source Data: USGS 1:50,000 Scale: 1:10,000 Detail: 12.5 Datum: WGS84

2003Topo

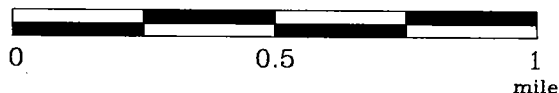
EXPLANATION



1/2-mile radius circle



APPROXIMATE SCALE



SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

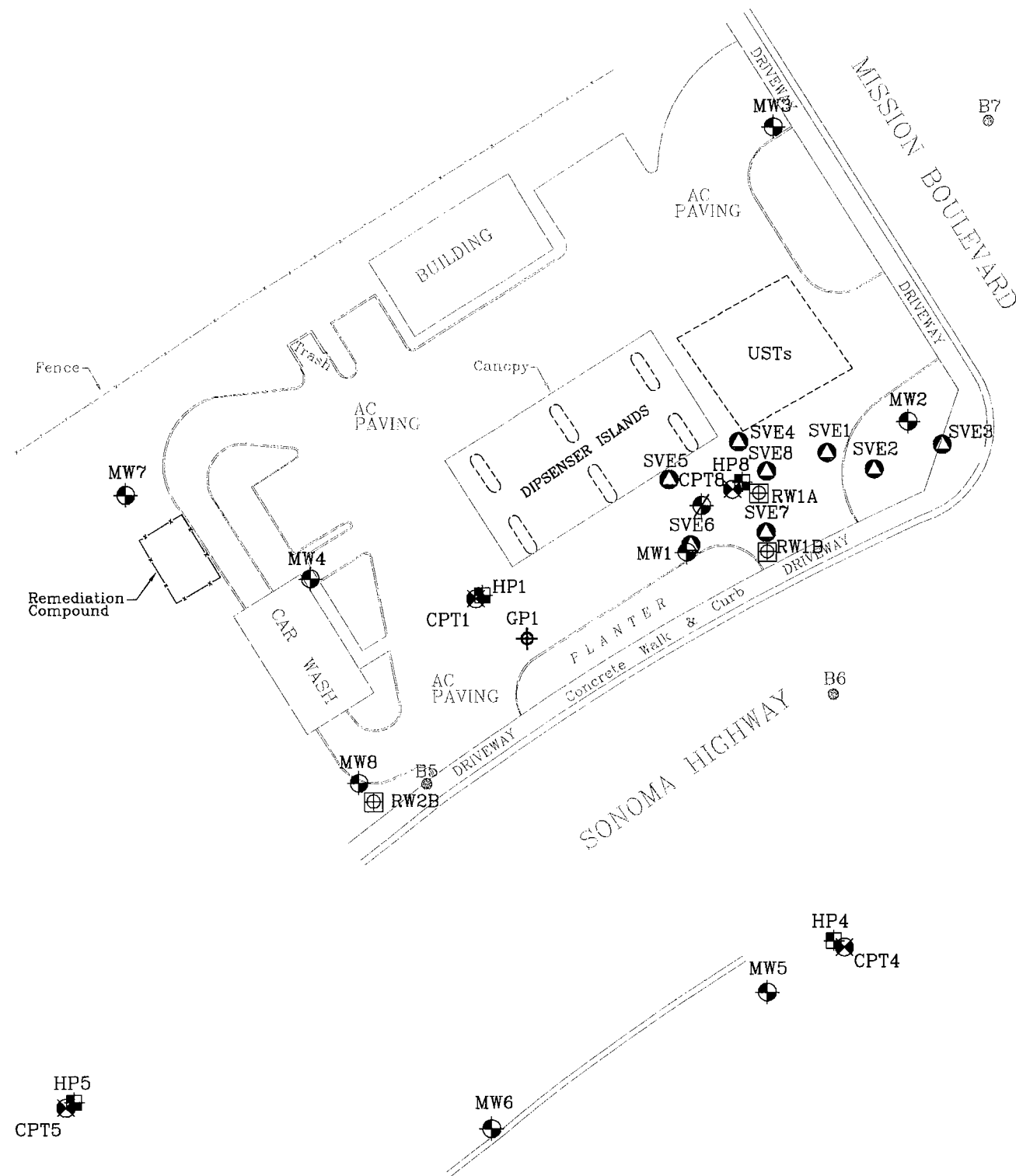
PROJECT NO.

2003

PLATE

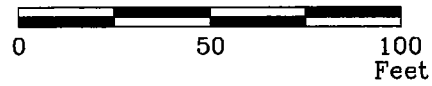
1





HP2
CPT2

APPROXIMATE SCALE



HP5
CPT5

MW6

HP4
CPT4
MW5

FN 20030005



GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

EXPLANATION

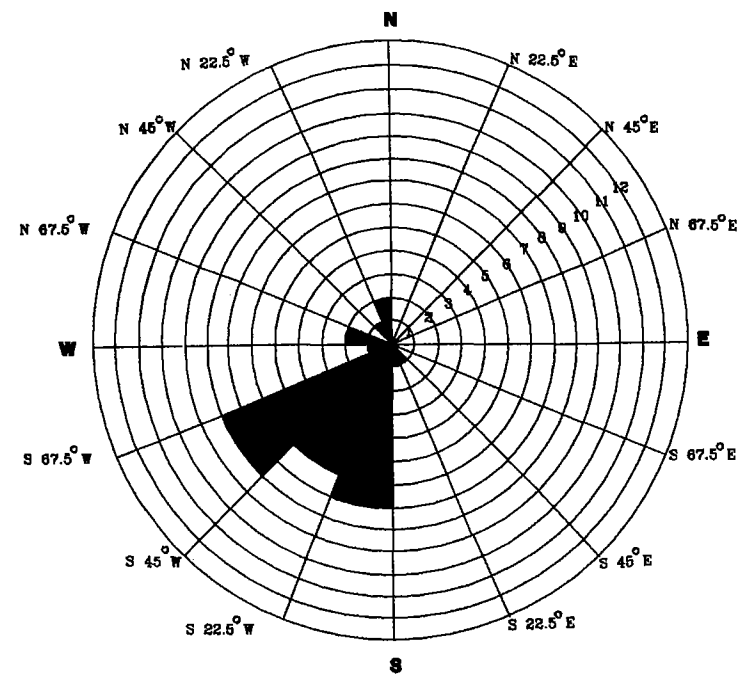
- MW8
Groundwater Monitoring Well
- SVE8
Air Sparge/Soil Vapor Extraction Well
- RW2B
Proposed Groundwater Recovery Well

- B7
Soil Boring
- CPT8
Cone Penetration Test Boring
- HP8
Hydropunch Boring
- GP1
Direct Push Sample
- Destroyed Dry Well

PROJECT NO.
2003

PLATE
2

Jan. 16, 2003

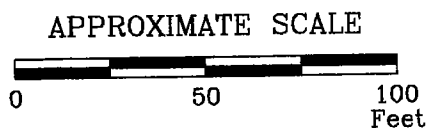
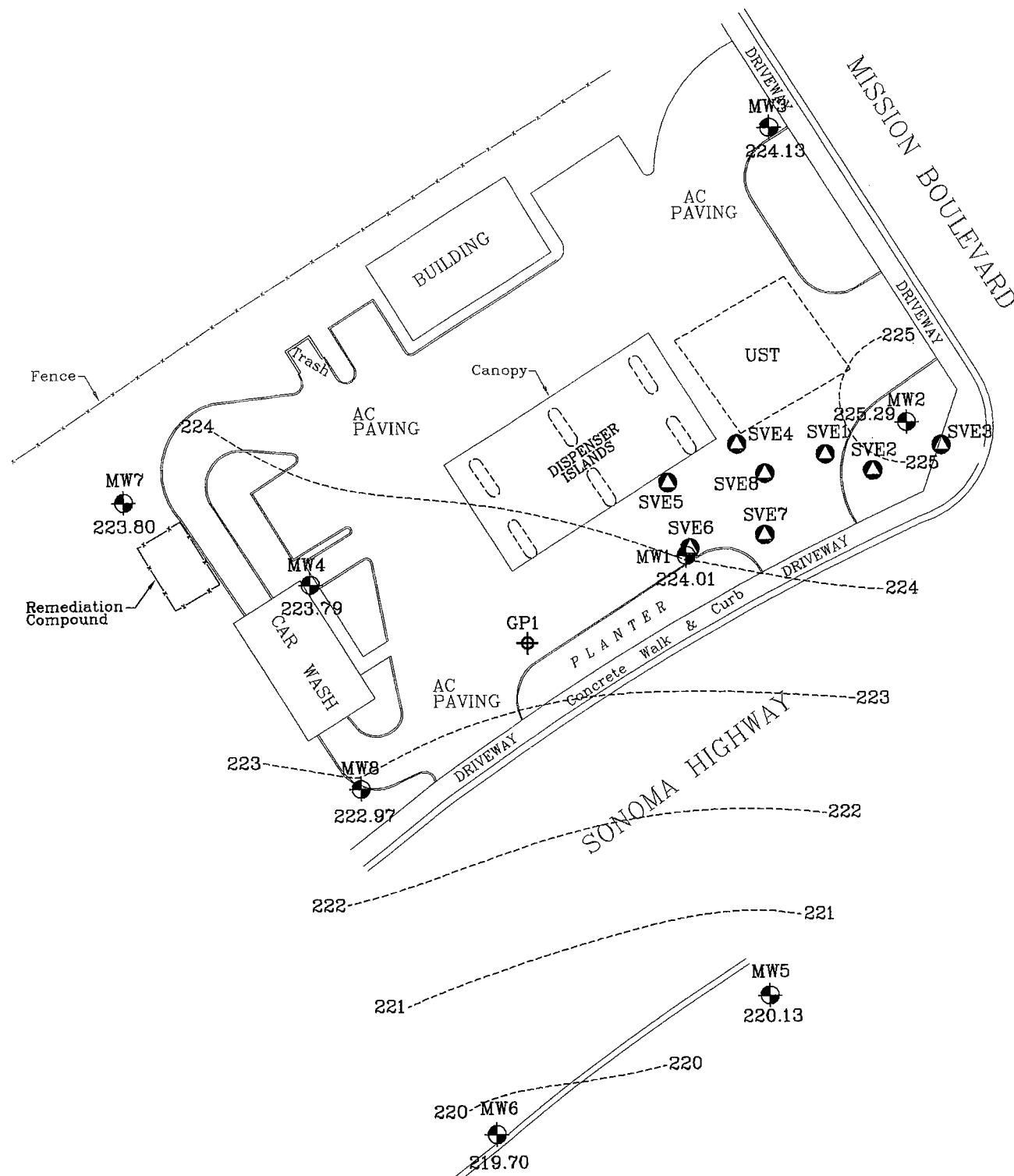


EXPLANATION

Rose diagram developed by evaluating the hydraulic gradient from the quarterly monitoring data. Each shaded area on the rose diagram represents the number of monitoring events that the hydraulic gradient plotted in that 22.5 degree sector. Data used is from second quarter to 1999 to first quarter 2006.

N Compass Direction

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM



225 -----Line of Equal Groundwater Elevation;
datum is mean sea level

FN 20030005_QM



GROUNDWATER ELEVATION MAP
March 30, 2006
FORMER EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

EXPLANATION

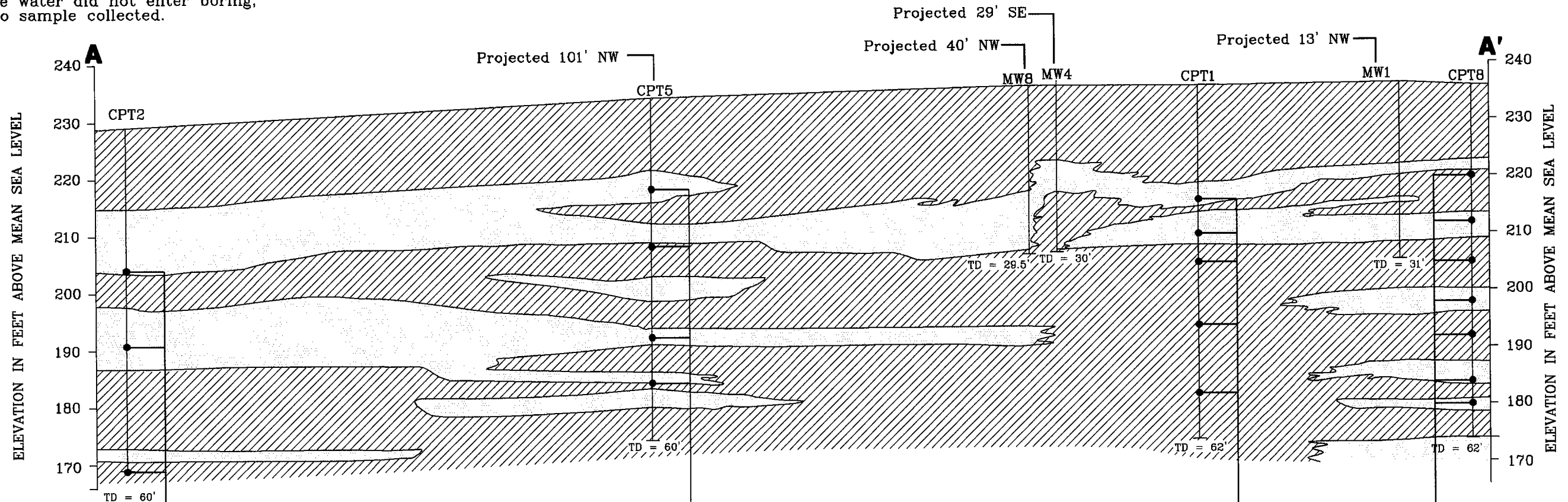
- MW8 Groundwater Monitoring Well
- 222.97 Groundwater elevation in feet;
datum is mean sea level
- SVE8 Air Sparge/Soil Vapor Extraction Well

- GP1 Direct Push Boring

PROJECT NO.
2003

PLATE
3

3/8/06 Sample Date
24 FT. Sample Depth
<1,000 Total Petroleum Hydrocarbons
as gasoline
<10 Benzene
1,000/270a Methyl Tertiary Butyl Ether
< Less Than the Stated Laboratory
Reporting Limit
ug/L Micrograms per Liter
a Analyzed using EPA Method 8021B
Dry Free water did not enter boring;
no sample collected.



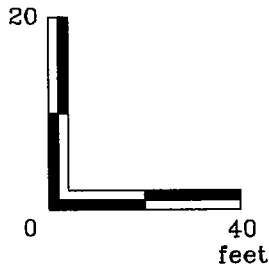
8/20/04		
25 FT.	38 FT.	60 FT.
<50	<50	<50
<0.50	<0.50	<0.50
<0.50	<0.50	<0.50

8/20/04			
16 FT.	26 FT.	42 FT.	50 FT.
DRY	DRY	DRY	<50.0
			<0.50
			3.40

8/20/04				
20 FT.	26 FT.	31 FT.	42 FT.	50 FT.
DRY	DRY	DRY	<100	197
			<1.00	<0.50
			6,100	80.9

3/8/06					
16 FT.	24 FT.	31 FT.	44 FT.	38 FT.	52 FT.
DRY	<1,000	DRY	DRY	420	DRY
	<10			<2.5	<50
	1,000/270a			80/69a	17/18a

APPROXIMATE SCALE



Vertical Exaggeration x2

FN 2003xsA-A'_2



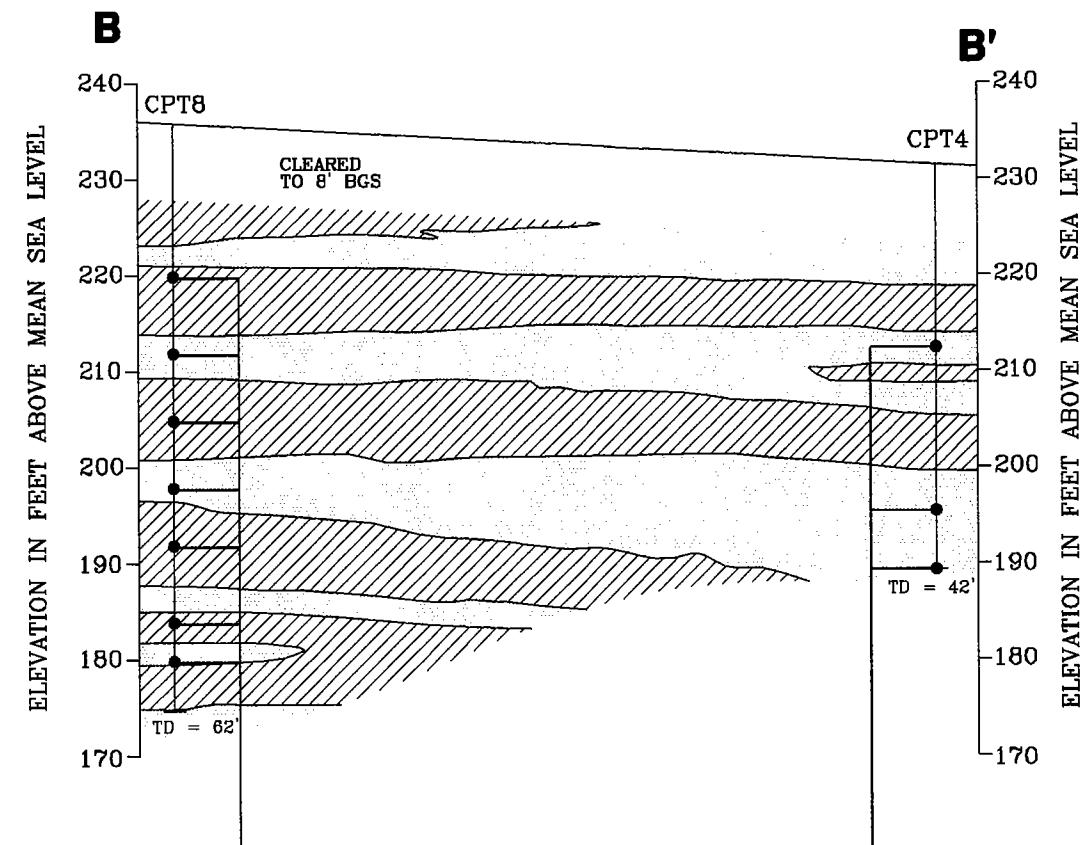
CROSS SECTION A-A'
FORMER
EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

EXPLANATION
[Symbol] Coarse-grained sediments
(including SP, SW, SM, SC,
and GC. Also includes select
layers, designated silt on the
CPT logs, interpreted to be
coarser water-bearing sediments
based on the presence of
groundwater and stratigraphic
correlation with sand layers
in the DP Borings.)
[Symbol] Fine-grained sediments
(including, CL, CH, and ML)

TD = Total Depth

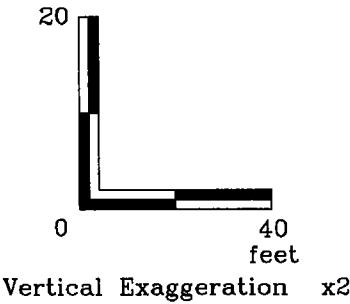
PROJECT NO.
2003
PLATE
4

9/24/04	Sample Date
42 FT.	Sample Depth
3,920	Total Petroleum Hydrocarbons as gasoline
<0.50	Benzene
6,450	Methyl Tertiary Butyl Ether
<	Less Than the Stated Laboratory Reporting Limit
ug/L	Micrograms per Liter
a	Analyzed using EPA Method 8021B
Dry	Free water did not enter boring; no sample collected.



3/8/06							9/24/04		
16 FT.	24 FT.	31 FT.	38 FT.	44 FT.	52 FT.	56 FT.	19 FT.	36 FT.	42 FT.
DRY	<1,000	DRY	420	DRY	DRY	<50	DRY	3,240	3,920
	<10		<2.5			<0.50		<0.50	<0.50
	1,000/270a		80/69a			17/18a		5,200	6,450

APPROXIMATE SCALE



FN 2003xsB-B'

CROSS SECTION B-B'

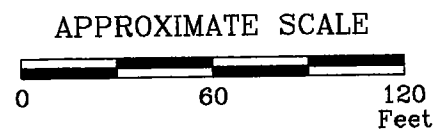
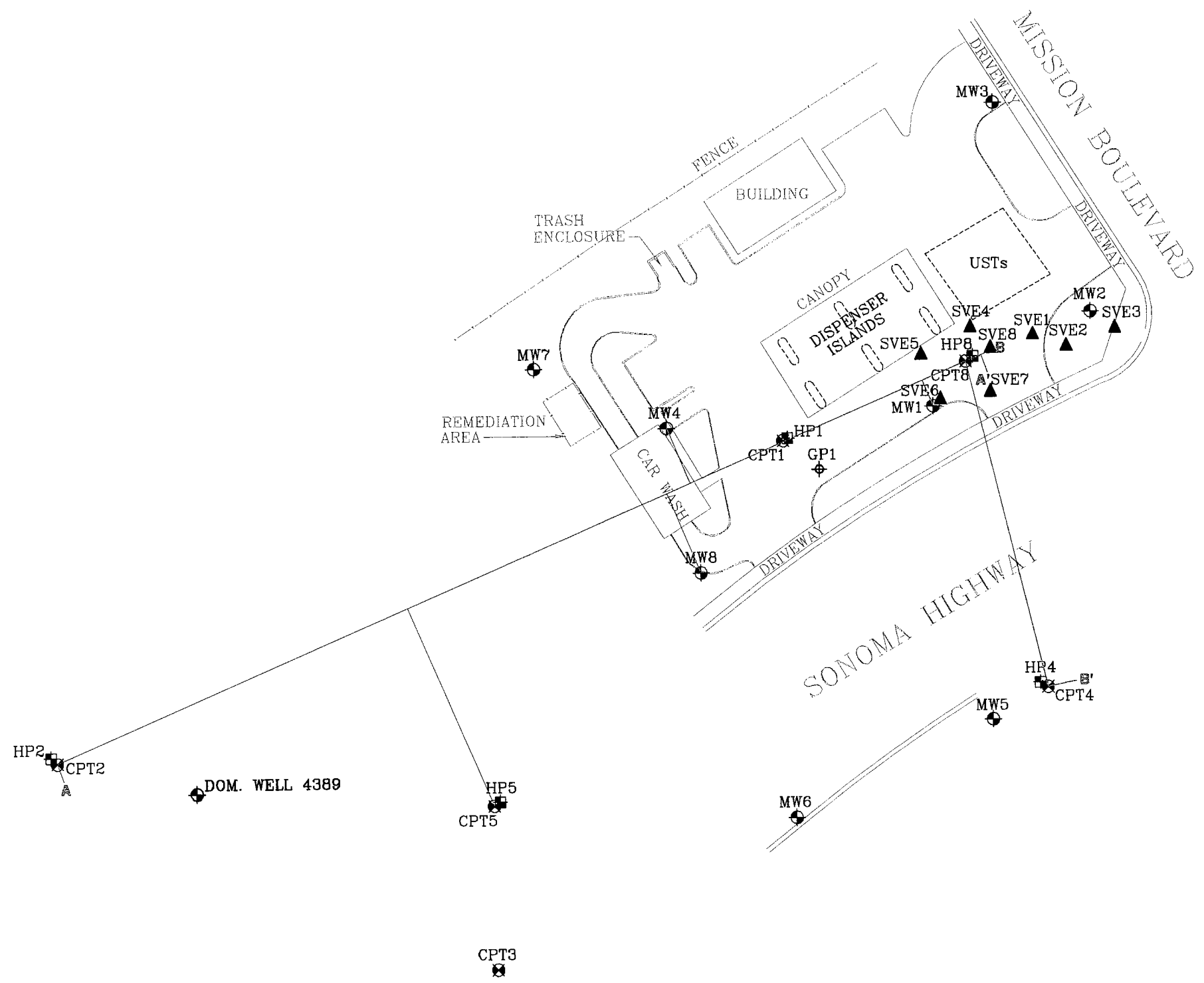
FORMER
 EXXON SERVICE STATION 7-3035
 4501 Sonoma Highway
 Santa Rosa, California

EXPLANATION	
	Coarse-grained sediments (including SP, SW, SM, SC, and GC. Also includes select layers designated silt on the CPT logs, interpreted to be coarser water-bearing sediments based on the presence of groundwater and stratigraphic correlation with sand layers in the DP Borings.)
	Fine-grained sediments (including, CL, CH, and ML)

TD = Total Depth

PROJECT NO.
2003
PLATE
5





FN 20030010_SP



CROSS SECTION LOCATIONS

FORMER
EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

EXPLANATION

- MW8 Groundwater Monitoring Well
- HP8 Hydropunch Boring
- GP1 Direct Push Boring

CROSS SECTION LOCATIONS

- CPT8 Cone Penetration Test Boring
- SVE8 Soil Vapor Extraction Well
- DOM. WELL 4389 Domestic Well

PROJECT NO.

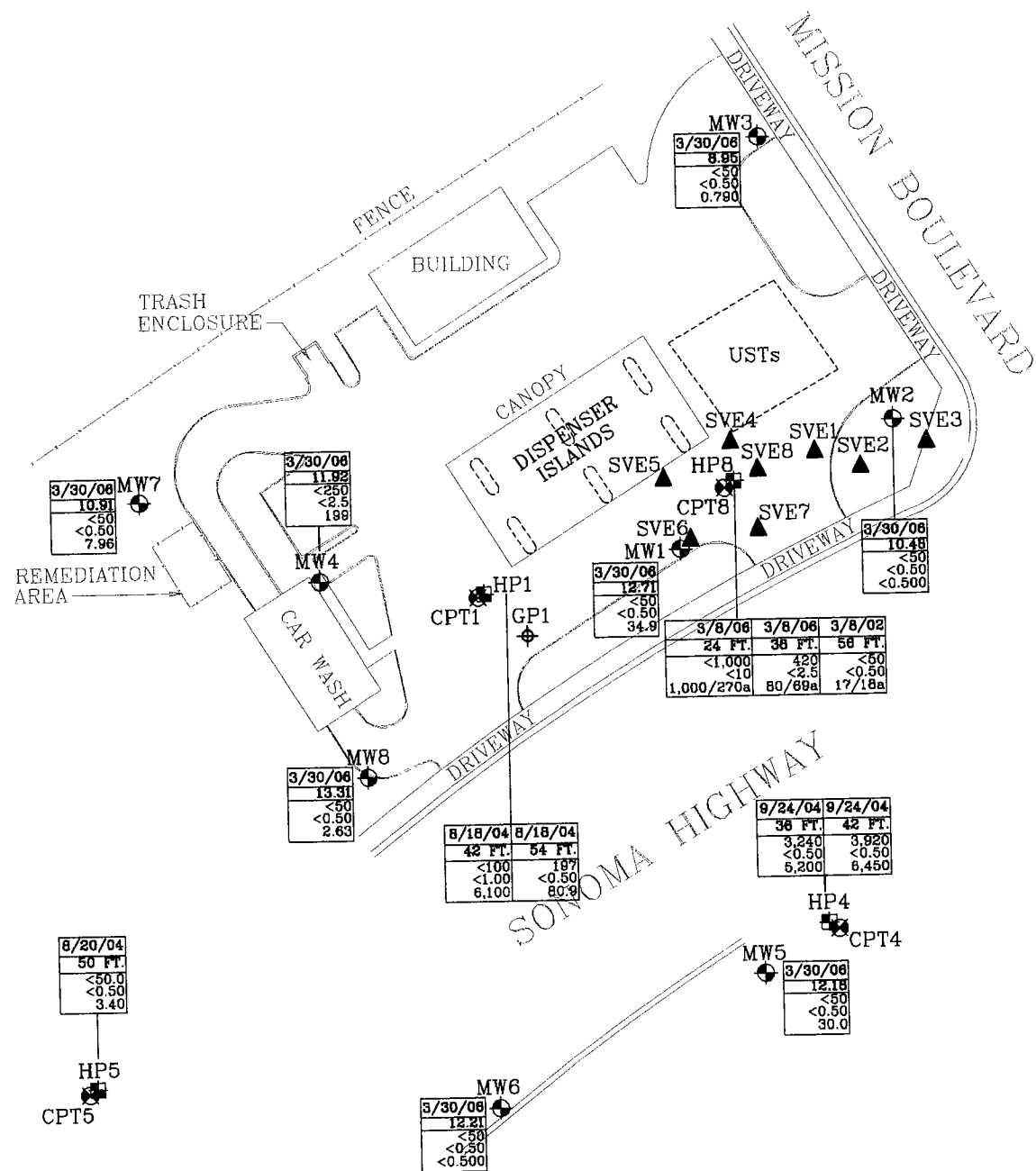
2003

PLATE

6

Analyte Concentrations in ug/L

9/24/04	Sample Date
36 FT	Sample Depth
3,920	Total Petroleum Hydrocarbons as gasoline
<0.50	Benzene
5,200	Methyl Tertiary Butyl Ether
<	Less Than the Stated Laboratory Reporting Limit
ug/L	Micrograms per Liter
a	MTBE results using EPA Method 8021B.



8/20/04	8/20/04	8/20/04
25 FT.	36 FT.	60 FT.
<50	<50	<50
<0.50	<0.50	<0.50
<0.50	<0.50	<0.50

HP2
CPT2

DOM. WELL 4389

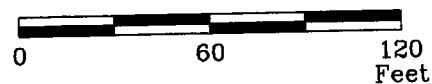
8/20/04
50 FT.
<50.0
<0.50
3.40

HP5
CPT5

8/19/04	8/19/04	8/19/04
25 FT.	36 FT.	48 FT.
73.2	<50	<50
<0.50	<0.50	<0.50
<0.50	6.00	19.4

CPT3

APPROXIMATE SCALE



FN 20030010_SP



SELECT GROUNDWATER ANALYTICAL RESULTS

FORMER
EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

EXPLANATION

MW8
Groundwater Monitoring Well

HP8
Hydropunch Boring

GP1
Direct Push Boring

CPT8
Cone Penetration Test Boring

SVE8
Soil Vapor Extraction Well

DOM. WELL 4389
Domestic Well

PROJECT NO.

2003

PLATE

7

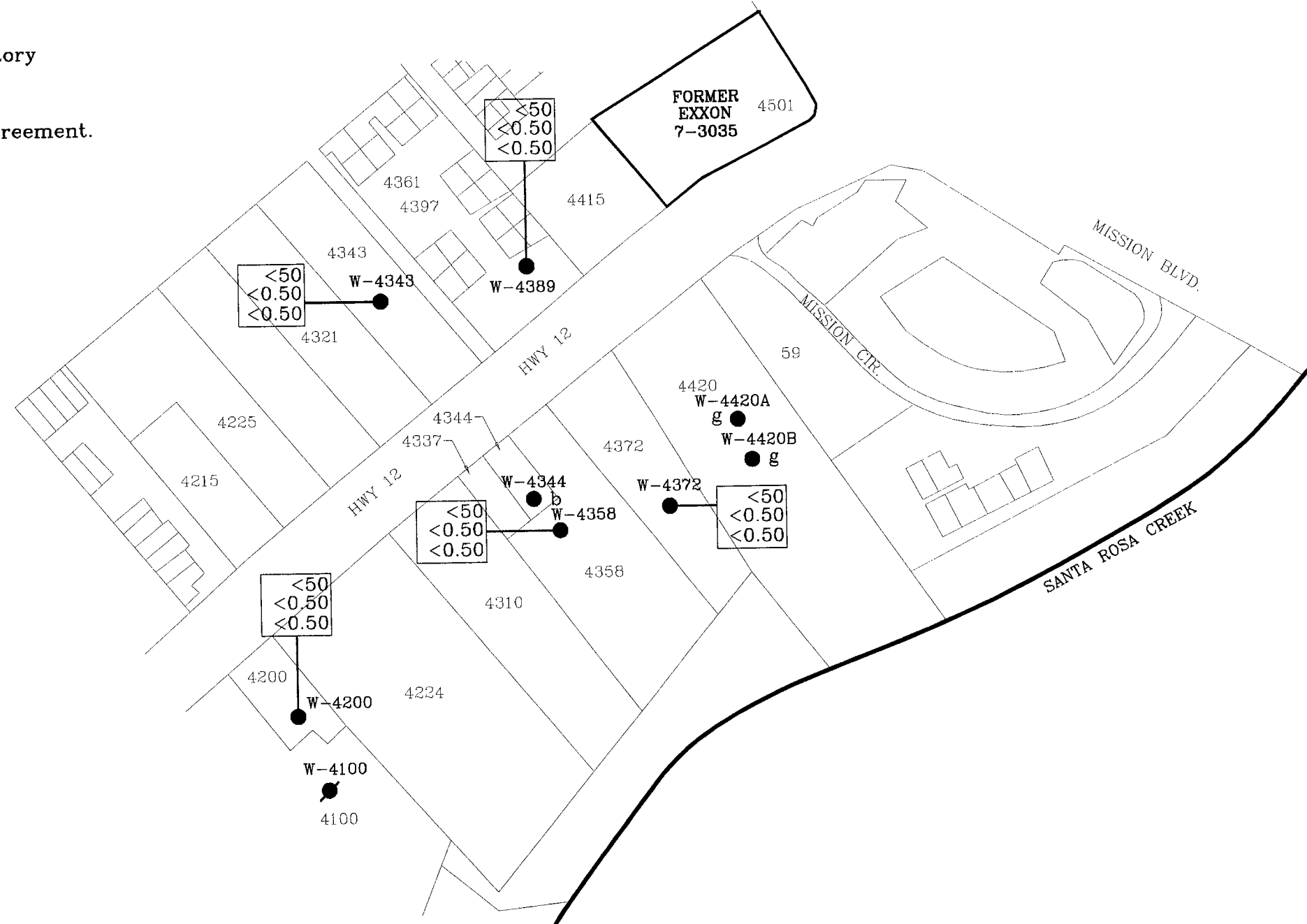
Analyte Concentrations in ug/L
Sampled March 30, 2006

<50 Total Petroleum Hydrocarbons
as gasoline
<0.50 Benzene
<0.50 Methyl Tertiary Butyl Ether

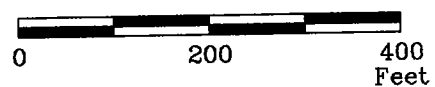
< Less Than the Stated Laboratory
Reporting Limit
ug/L Micrograms per Liter

b One-time only per access agreement.

g Unable to extract water; no
utility service.



APPROXIMATE SCALE



FN 20030009_SP



**SELECT GROUNDWATER ANALYTICAL RESULTS
PRIVATE WELLS
March 30, 2006**

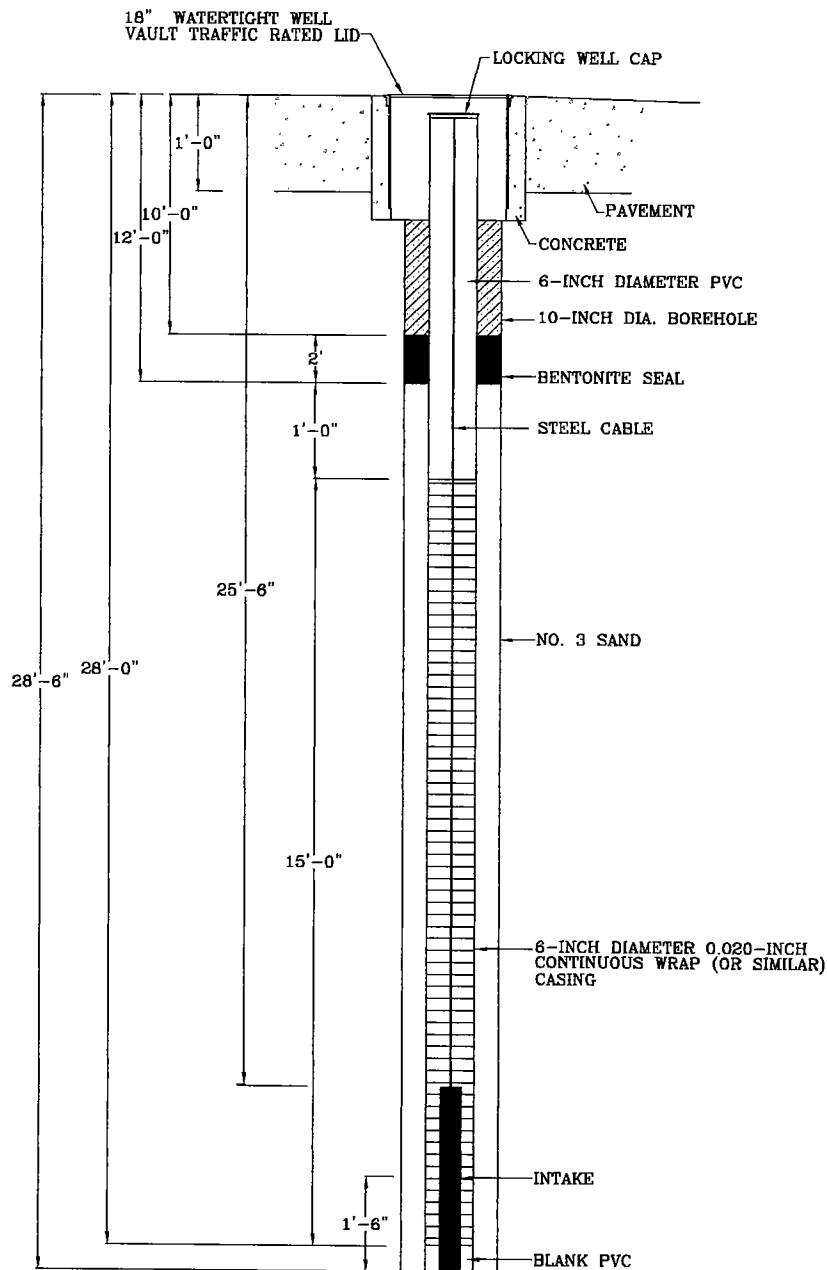
FORMER
EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

EXPLANATION

- W-4389
● Domestic Well
- W-4100
● Destroyed Domestic Well

PROJECT NO.
2003

PLATE
8



NOT TO SCALE

FN 2003 /DETAILS/RW1A



WELL CONSTRUCTION DETAIL - RW1A

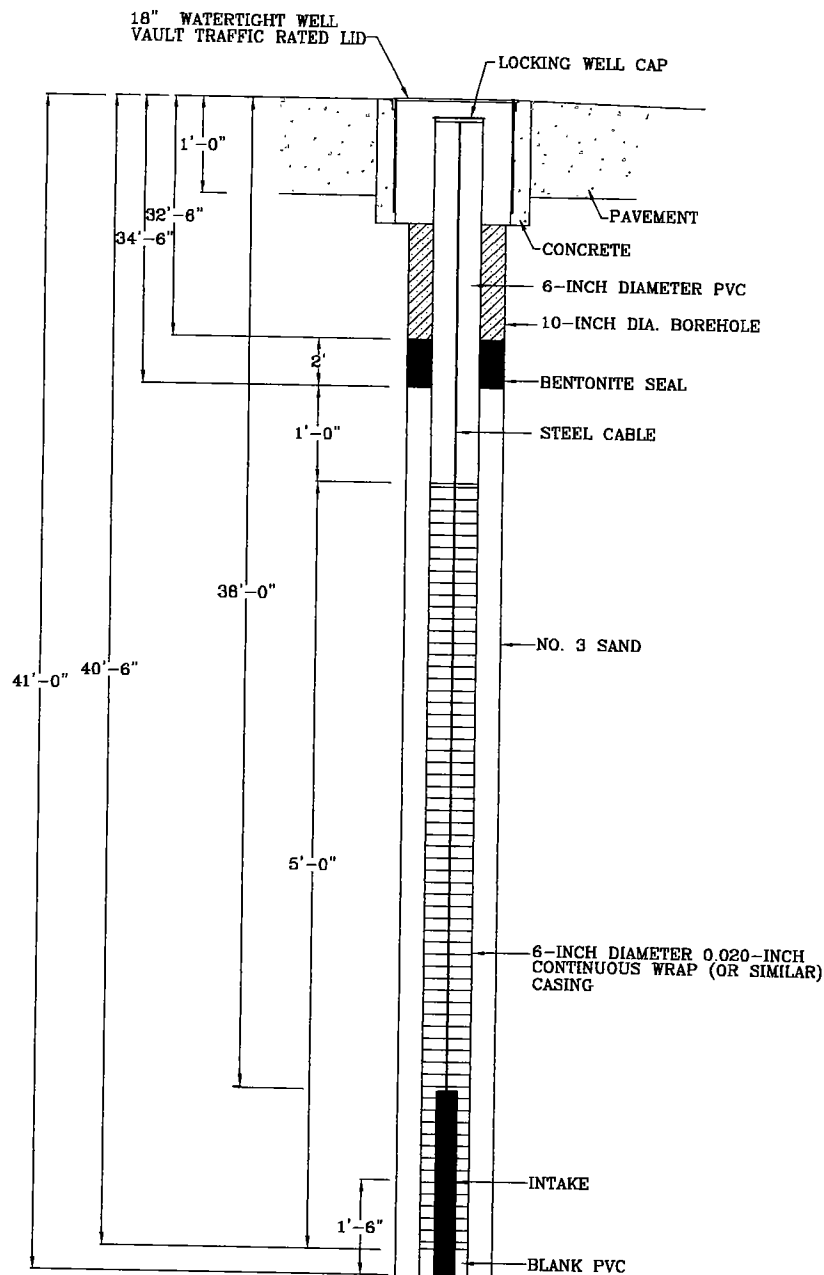
FORMER EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

PROJECT NO.

2003

PLATE

9



NOT TO SCALE

FN 2003 /DETAILS/RW1A



WELL CONSTRUCTION DETAIL - RW1B

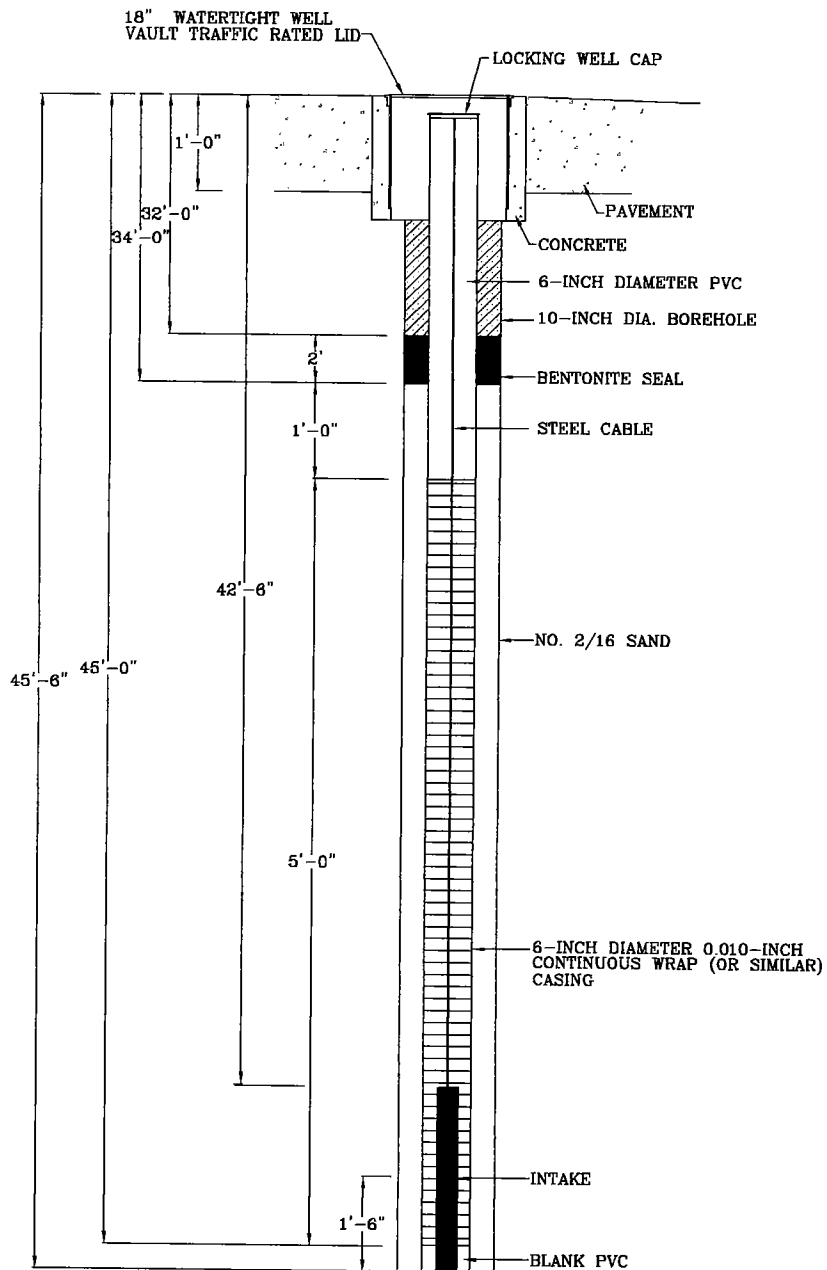
FORMER EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

PROJECT NO.

2003

PLATE

10



NOT TO SCALE

FN 2003 /DETAILS/RW1A



WELL CONSTRUCTION DETAIL - RW2B

FORMER EXXON SERVICE STATION 7-3035
4501 Sonoma Highway
Santa Rosa, California

PROJECT NO.

2003

PLATE

11

APPENDIX A
REGULATORY CORRESPONDENCE



California Regional Water Quality Control Board
North Coast Region
John Corbett, Chair



Alan C. Lloyd, Ph.D.
Agency Secretary

www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold
Schwarzenegger
Governor

February 16, 2006

Ms. Jennifer Sedlachek
ExxonMobil Refining and Supply-Global Remediation
4096 Piedmont Avenue #194
Oakland, CA 94611

RECEIVED
FEB 17 2006

BY:.....

Subject: Addendum to Work Plan for Additional Site Assessment
Request for Interim Remedial Action

File: Exxon #7-3035, 4501 Sonoma Highway, Santa Rosa, CA
CA Case No. 1TSR295

Dear Ms. Sedlachek:

North Coast Regional Water Quality Control Board (Regional Water Board) staff has reviewed the *Addendum to Work Plan for Additional Site Assessment* dated October 28, 2005 and prepared by Environmental Resolutions, Inc. (ERI) on behalf of ExxonMobil for the subject site. Regional Water Board staff concurs with the scope of work proposed in the Addendum. Verbal concurrence with the Addendum was given to Ms. Paula Sime of ERI on January 19, 2006.

During a phone conversation with Ms. Sime on January 19, 2006, staff learned that access to private property has not been granted for the approved workplan, resulting in a delay of implementation of the approved work. At this time, please expedite implementation of the approved workplan and Addendum by re-contacting property owners regarding access and implementing portions of the workplan onsite and at locations where access is granted.

Regional Water Board staff has reviewed the 4th Quarter January 10, 2006 Remediation Status Report for this site. The Status Report indicates that the remediation system was shut down for repair during fourth quarter 2005.

There are numerous domestic wells used for drinking water near this site. A CPT investigation completed in 2004 documents the presence of MTBE, TAME and TBA in on-site groundwater at depths from 42 to 54 feet.

Regional Water Board staff requests submittal of a proposal and workplan for interim remedial action. A proposal for interim remedial action should evaluate the effectiveness of the current on-site remediation system and recommend improvements or changes, as necessary. Staff is aware that additional on-site CPT work proposed in the Addendum will support development of an effective interim remedial action. Therefore, please submit a proposal for interim remediation 45 days following the completion of the on-site CPT work.

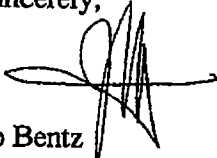
California Environmental Protection Agency

Recycled Paper

February 16, 2006

A proposal and workplan for interim remedial action is due 45 days following completion of on-site CPT work. If you have any questions, please contact me at (707) 576-2838.

Sincerely,



Jo Bentz
Engineering Geologist

020306_JLB_4501 Sonoma Hwy Addendum Concur. doc

cc: ✓ Ms. Paula Sime and Mr. James Chappell, Environmental Resolutions, Inc., 601 North McDowell Blvd., Petaluma, CA 94954
Mr. Joseph A Aldridge, Valero Energy Corporation, 685 West Third Street, Hanford, CA 93230
Santa Rosa Fire Department
Mr. John Anderson, SCEHD
Ms. Lisa Esposito, Massingham and Associate Management, Inc., 2890 North Main Street, Suite 304, Walnut Creek, CA 94597

Paula M. Sime

From: Jo Bentz [JBentz@waterboards.ca.gov]
Sent: Tuesday, May 30, 2006 2:12 PM
To: Paula M. Sime
Cc: David Evans
Subject: Re: 4501 Sonoma Highway

Paula-

It appears that work is moving forward and therefore, you may submit the CPT investigation report by June 15, 2006.

In our February 16, 2006 letter to Exxon, the Regional Water Board requested a proposal for interim remedial action. Your email states that a RAP is currently "in progress" and ERI will be submitting the RAP with the CPT report.

Generally, before a RAP is submitted for a UST site, a CAP, to include a feasibility study, needs to be submitted and reviewed. The Regional Water Board concurs with the CAP and publically notices the CAP for 30 days. This is required by Title 23, Chapter 16 of the UST Regulations. Interim action is performed to abate a discharge and is not the final cleanup remedy for the site.

Let's further discuss the RAP by phone.

Thank you-

Jo Bentz
North Coast Regional Water Quality Control Board 5550 Skylane Boulevard, Suite A Santa Rosa, CA 95403
Phone-(707) 576-2838
jbentz@waterboards.ca.gov

>>> "Paula M. Sime" <psime@ERI-US.com> 5/26/2006 11:35 AM >>>
Jo,

As I mentioned in my telephone messages to you, ERI is requesting an extension on the due date for the CPT results report and Remedial Action Plan (RAP) for Former Exxon Service Station 7-3035, located at 4501 Sonoma Highway, Santa Rosa. The CPT field work was completed March 27, 2006. The report is in the final stages of review at this time. ERI is reviewing the results of the CPT field work with respect to previous site data and sensitive receptor data to evaluate the best remedial plan for the site prior to completing the RAP, which will be submitted under separate cover. A plan for remediation is in place and the RAP is currently in progress. ERI requests to extend the due date for the CPT results report and the RAP to June 15, 2006.

Please respond with your comments. Thank you.

Paula Sime
Environmental Resolutions, Inc.
601 North McDowell Blvd.
Petaluma, CA 94954
(707) 766-2026 office
(707) 338-8012 cell
(707) 789-0414 fax
psime@eri-us.com

APPENDIX B

GROUNDWATER CLEANUP OBJECTIVES

TABLE 2-1: BENEFICIAL USES OF SURFACE WATERS OF THE NORTH COAST REGION

HU/HA/ HSA	HYDROLOGIC UNIT/AREA/SUBUNIT/ DRAINAGE FEATURE	BENEFICIAL USES																				
		MUN	AGR	IND	PRO	GWR	FISH	NAV	POW	REC1	REC2	COMM	WARM	COLD	BSA	SAL	WLD	RARE	MAR	MIGR	SPWN	SHELL
113.60	Pt Arena Hydrologic Area																					
113.61	Greenwood Creek Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
113.62	Elk Creek Hydrologic Subarea	P	P	E	P	E	E	E	P	E	E	E					E	E		E	E	
113.63	Alder Creek Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
113.64	Brush Creek Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
113.70	Garcia River Hydrologic Area	E	E	E	P		E	E	P	E	E	E		E			E	E		E	E	
113.80	Gualala River Hydrologic Area																					
113.81	North Fork Gualala Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
113.82	Rockpile Creek Hydrologic Subarea	E	E	E	P	E		E	P	E	E	E		E			E	E		E	E	
113.83	Buckeye Creek Hydrologic Subarea	E	E	E	P	E		E	P	E	E	E		E			E	E		E	E	
113.84	Wheatfield Fork Hydrologic Subarea	E	E	E	P	E		E	P	E	E	E		E			E	E		E	E	
113.85	Gualala Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
113.90	Russian Gulch Hydrologic Area	E	E	E	P	E				E	E	P		E			E	E		E	E	
114.00	Russian River Hydrologic Unit																					
114.10	Lower Russian River Hydrologic Area																					
114.11	Guerneville Hydrologic Subarea	E	E	E	P	E	E	E	E	E	E	E		E			E	E		E	E	
114.12	Austin Creek Hydrologic Subarea	E	E	E	P	E		E	E	E	E	E		E			E	E		E	E	
114.20	Middle Russian River Hydrologic Area																					
114.21	Laguna Hydrologic Subarea	P	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
114.22	Santa Rosa Hydrologic Subarea	E	E	E	P	E		E	P	E	E	E		E			E	E		E	E	
114.23	Mark West Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
114.24	Warm Springs Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
114.25	Geyserville Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
114.26	Sulphur Creek Hydrologic Subarea	E	E	E	P	E		E	P	E	E	E		E			E	E		E	E	
114.30	Upper Russian River Hydrologic Area																					
114.31	Ukiah Hydrologic Subarea	E	E	E	P	E	E	E	P	E	E	E		E			E	E		E	E	
114.32	Coyote Valley Hydrologic Subarea	E	E	E	P	E	E	E	E	E	E	E		E			E	E		E	E	
114.33	Forsythe Creek Hydrologic Subarea	E	E	E	P	E		E	P	E	E	E		E			E	E		E	E	
115.00	Bodega Hydrologic Unit																					
115.10	Salmon Creek Hydrologic Area	E	E	E	P	E		E		E	E	E		E			E	E		E	E	
115.20	Bodega Harbor (or Bay) Hydrologic Area	E	E	E	P	E		E		E	E	E		E			E	E		E	E	
115.30	Estero Americano Hydrologic Area	E	E	E	P	E		E		E	E	E		E			E	E		E	E	
115.40	Estero de San Antonio Hydrologic Area	E	E	E	P	E		E		E	E	E		E			E	E		E	E	
	Minor Coastal Streams (not listed above)**	E	P	P	P	P	P	P	P	E	P	P	P	P	P		E	E	P	P	P	
	Ocean Waters			P	P			E		E	E	E		P			E	E	E	E	E	
	Bays			P	P			E		P	E	E	P	E	P		E	P	E	E	E	
	Saline Wetlands			P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	
	Freshwater Wetlands	P	P	P		P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	
	Estuaries	P	P	P	P		P	E	P	E	E	P	P	E	P		E	P	E	E	E	
	Groundwater	E	E	E	P																	

Waterbodies are grouped by hydrologic unit (HU) or hydrologic area (HA)
 **Permanent or Intermittent P=Potential E=Existing
 *EST use applies only to the estuarine portion of the waterbody as defined in Chapter 2

TABLE 3-2

**INORGANIC, ORGANIC, AND FLUORIDE CONCENTRATIONS NOT TO BE
EXCEEDED IN DOMESTIC OR MUNICIPAL SUPPLY ^{1, 2}**

Constituent	LIMITING CONCENTRATION IN MILLIGRAMS PER LITER			
	Lower	Optimum	Upper	Maximum Contaminant Level, mg/L
Fluoride ³				
53.7 and below	0.9	1.2	1.7	2.4
53.8 to 58.3	0.8	1.1	1.5	2.2
58.4 to 63.8	0.8	1.0	1.3	2.0
63.9 to 70.6	0.7	0.9	1.2	1.8
70.7 to 79.2	0.7	0.8	1.0	1.6
79.3 to 90.5	0.6	0.7	0.8	1.4
Inorganic Chemicals				
* Aluminum				1.0
Arsenic				0.05
Barium				1.0
Cadmium				0.01
Chromium				0.05
Lead				0.05
Mercury				0.002
Nitrate-N (as NO ₃)				45
Selenium				0.01
Silver				0.05
Organic Chemicals				
(a) Chlorinated Hydrocarbons				
Endrin				0.0002
Lindane				0.004
Methoxychlor				0.1
Toxaphene				0.005
(b) Chlorophenoxys				
2,4-D				0.1
2,4,5-TP (Silvex)				0.01
(c) Synthetics				
Atrazine				0.003
Bentazon				0.018
Benzene				0.001
Carbon Tetrachloride				0.0005
Carbofuran				0.018
Chlordane				0.0001

TABLE 3-2 (CONTINUED)

**INORGANIC, ORGANIC, AND FLUORIDE CONCENTRATIONS NOT TO BE
EXCEEDED IN DOMESTIC OR MUNICIPAL SUPPLY^{1,2}**

Constituent	LIMITING CONCENTRATION IN MILLIGRAMS PER LITER Maximum Contaminant Level, mg/L
(c) Synthetics (cont'd.)	
1,2-Dibromo-3-chloropropane	0.0002
1,4-Dichlorobenzene	0.005
1,1-Dichloroethane	0.005
1,2-Dichloroethane	0.0005
cis-1,2-Dichloroethylene	0.006
trans-1,2-Dichloroethylene	0.01
1,1-Dichloroethylene	0.006
1,2-Dichloropropane	0.005
1,3-Dichloropropene	0.0005
Di(2-ethylhexyl)phthalate	0.004
* Ethylbenzene	0.680
Ethylene Dibromide	0.00002
Glyphosate	0.7
Heptachlor	0.00001
Heptachlor epoxide	0.00001
Molinate	0.02
Monochlorobenzene	0.030
Simazine	0.010
1,1,2,2-Tetrachloroethane	0.001
Tetrachloroethylene	0.005
* Thiobencarb	0.07
1,1,1-Trichloroethane	0.200
1,1,2-Trichloroethane	0.032
Trichloroethylene	0.005
Trichlorofluoromethane	0.15
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2
Vinyl Chloride	0.0005
* Xylenes ⁴	1.750

¹ Values included in this table have been summarized from California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Sections 64435 (Tables 2 and 3) and 64444.5 (Table 5).

² The values included in this table are maximum contaminant levels for the purposes of groundwater and surface water discharges and cleanup. Other water quality objectives (e.g., taste and odor thresholds or other secondary MCLs) and policies (e.g., State Water Board "Policy With Respect to Maintaining High Quality Waters In California") that are more stringent may apply.

³ Annual Average of Maximum Daily Air Temperature, °F Based on temperature data obtained for a minimum of five years. The average concentration of fluoride during any month, if added, shall not exceed the upper concentration. Naturally occurring fluoride concentration shall not exceed the maximum contaminant level.

⁴ Maximum Contaminant Level is for either a single isomer or the sum of the isomers.

* Constituents marked with an * also have taste and odor thresholds that are more stringent than the MCL listed. Taste and odor thresholds have also been developed for other constituents not listed in this table.

APPENDIX C
FIELD PROTOCOL

FIELD PROTOCOL

Site Safety Plan

Field work will be performed by ERI personnel in accordance with a Site Safety Plan developed for the site. This plan describes the basic safety requirements for the subsurface investigation at the site. The Site Safety Plan is applicable to personnel and subcontractors of ERI. Personnel at the site are informed of the contents of the Site Safety Plan before work begins. A copy of the Site Safety Plan is kept at the work site and is available for reference during the work. The ERI geologist will act as the Site Safety Officer.

Drilling of Soil Borings

Prior to the drilling of soil borings, ERI will acquire necessary permits from the appropriate agency(ies). ERI will also contact Underground Service Alert (USA) and a private underground utility locator (per ExxonMobil protocol) before drilling to help locate utility lines at the site. ERI will clear the proposed locations to a depth of approximately 4 or 8 feet (depending on the location), before drilling to reduce the risk of damaging underground structures.

CPT and HP borings will be advanced using direct-push technology. Soil borings will be drilled with a direct-push drill rig. Core samples will be continuously collected from the soil borings. Drill rods and sampling equipment will be steam-cleaned before use and between borings to minimize the possibility of crosshole contamination. The rinsate will be containerized and stored on site. ERI will coordinate with ExxonMobil for appropriate disposal of the rinsate.

Drilling will be performed under the observation of a field geologist, and the earth materials in the boring will be identified using visual and manual methods, and classified as drilling progresses using the Unified Soil Classification System.

Monitoring and recovery wells will be drilled using a hollow-stem auger drill rig. During drilling, soil samples will be collected at five-foot intervals and continuously across anticipated screen intervals. Samples will be collected with a California-modified, split-spoon sampler equipped with laboratory-cleaned brass sleeves. Samples will be collected by advancing the auger to a point just above the sampling depth and driving the sampler into the soil. The sampler will be driven 18 inches with a standard 140-pound hammer repeatedly dropped 30 inches. The number of blows required to drive the sampler each successive 6-inch interval will be counted and recorded to give an indication of soil consistency.

Soil samples will be monitored with a photo-ionization detector (PID), which measures hydrocarbon concentrations in the ambient air or headspace above the soil sample. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect concentrations of hydrocarbons with the same precision as laboratory analyses. Soil samples selected for possible chemical analysis will be sealed promptly with Teflon® tape and plastic caps. Select soil samples may be collected using EPA Method 5035. The samples will be labeled and placed in iced storage for transport to the laboratory. Chain-of-Custody records will be initiated by the geologist in the field, updated throughout handling of the samples, and sent with the samples to the laboratory. Copies of these records will be in the final report. Cuttings generated during drilling will be placed on plastic sheeting and covered and left at the site. ERI will coordinate with ExxonMobil for the soil to be removed to an appropriate disposal facility.

Groundwater Sample Collection

Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter [ml] glass vials, 1,000-ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.

Depending on the required analysis, each sample container is preserved with hydrochloric acid, nitric acid, etc., or it is preservative free. The type of preservative used for each sample is specified on the Chain-of-Custody form.

Monitoring or Recovery Well Construction

Monitoring or recovery wells are constructed in borings using thread-jointed, 2-inch to 6-inch inner diameter, Schedule 40 polyvinyl chloride (PVC) casing. No chemical cements, glues, or solvents are used in well construction. The screened portion of each well consists of factory-perforated, wire-wrapped, or continuously spiral slotted casing with 0.010- to 0.020-inch wide slots. Unperforated casing is installed from the top of each screen to the ground surface. The annular space in the well is packed with sand to approximately 1 to 2 feet above the slotted interval. A bentonite plug is added above the sand pack to prevent cement from entering the well pack. The remaining annulus is backfilled to grade with a slurry of Portland cement.

The monitoring wells are protected with a traffic-rated utility box equipped. The box has a watertight seal to protect against surface-water infiltration. The design of this box discourages vandalism and reduces the possibility of accidental disturbance of the well.

Well Development

ERI will wait a minimum of 24 hours before development of the monitoring wells to allow the grout to cure. Initially, a water sample is collected for subjective analysis before development of the monitoring wells. This sample is collected from near the water surface in the well with a Teflon® bailer cleaned with a laboratory-grade detergent and deionized water. The wells are developed with a surge block and pump. Well development continues until the discharge water is clear of silt and sand, typically approximately 10 casing volumes. Clay-size sediments derived from the screened portion of the formation cannot be eliminated by well development. ERI coordinates with Exxon Mobil for disposal of the purged water.

Groundwater Sampling Protocol

The static water level and separate-phase product level, if present, in each well that contains water and/or separate-phase product are measured with an ORS Interface Probe, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from top of casing elevations.

Initially, a water sample is collected for subjective analysis before sampling the monitoring wells. Groundwater samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon® or polypropylene bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable free-phase hydrocarbons or sheen. If appropriate, free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until a minimum of three well casing volumes is purged and the temperature, pH, and conductivity of the purged water has stabilized. Water samples from wells in which the temperature, pH, and conductivity do not stabilize are considered to be "grab samples".

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter (ml) glass vials, 1,000 ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.